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The year now drawing to a close, marked as it has been by war, famine, and anxiety all through the world, will hardly leave many regrets behind it: it can hardly give place to a worse one. The new year may have in store the blessings of peace and a revival of commerce. We approach it hopefully, though not with too great confidence.

Pharmaceutically the year has been an interesting one. It is not our task here to recapitulate its events. The well-filled index which accompanies the present number of our journal indicates sufficiently the history of the past twelve months, so far as chemists and druggists are directly concerned.

Our nineteenth volume, which we now complete, again contains over 500 pages of literary matter. We are more likely to increase than to diminish that number in the year before us. The trade never more than now needed an independent organ, and we have earnestly striven to defend the honest interests of chemists and druggists. We are pleased to add that, during the current year, our subscription list has been considerably augmented, but we particularly desire to retain our old subscribers, and we shall take it as an especial favour if those who receive in this number intimation of the expiration if their subscription will have the goodness to send their remittances for another year at as early a date as convenient.

We have sent to all subscribers during the past month a copy of our Diary for 1878. In this we have made several

useful additions, in order to render it especially serviceable as a work of reference for pharmacoutists. The Globe Parcel Express Company have contracted with us to deliver all Diaries in the United Kingdom, free of charge, to the consignees. In the event of non-delivery or of charges having been made in any case by accident, we request the favour of a communication.

The long-looked for and important legal contest between the apothecaries and the chemists was opened last month in the Court of Exchequer. Sir Henry James, Q.C., M.P., the counsel for the chemists, who has taken an especial interest in this case, had commenced a speech which was evidently likely to be a very long one. But before he had developed his argument the judges intimated their opinion that the evidence should be re-heard, as in their view the point at issue turned on the practice of the trade at the time of the passing of the Apothecaries Act. Sir Henry James gladly accepted their suggestion, which became an order, notwithstanding the protest of the counsel for the apothecaries. The case will therefore be re-tried in that court. The opposition of the apothecaries' counsel to this course sufficiently indicates to which side the advantage of this preliminary encounter leans. We give a verbatim report of the trial, taken by our own reporters.

It will be observed from the report of the meeting of the Executive Committee of the Chemists' and Druggists' Trade Association that there is an unhesitating determination on their part to fight this most important question to the highest tribunals, if such should be necessary. It is evident that the proceedings as they are being conducted must be very costly, but as the rights involved are admittedly almost essential to the existence of the trade of a chemist and druggist, it is sincerely to be hoped that the association will be cordially supported in their enterprise.

Among some press opinions on the "counter practice" case we have pleasure in publishing a short article which appeared in the *Globe*. That journal sees that the case is one "of much social interest," and concludes that "if the ruling of the County Court judge be upheld a man who may take poison by mistake may not be able to get an emetic in time to save his life."

The Trade Association has decided to hold its second annual meeting in London in May, 1878.

The Birmingham and Midland Counties Chemists intend to hold a *soirée* and exhibition on January 23.

The Glasgow chemists are again barking at the Pharmaceutical Council on the subject of the Preliminary Examination. Mr. Fairlie, of Glasgow, also complains, in a spirited address, of the small benefit which the society gives to the provinces in the matter of education.

The Coventry chemists have formed an association, and the Edinburgh assistants have started an annual supper.

Original pharmaceutical papers appear in this number on compound mixture of iron and aromatic mixture of iron. We also print abstracts of other scientific contributions.

The Pharmaceutical Council has invested a further 2,000l. in Three per Cents., the president expressing a hope that the society might some day buy a freehold home for itself. The Council has also gone into committee on the counter practice question.

The Post Office proposes from January 1 to reduce the fee for registering letters from 4d. to 2d., and at the same time to be responsible to the extent of 2l. As a set-off to this advantage the authorities will raise the charge for money orders.

The Birmingham Inspector of Nuisances made a most extraordinary mistake last month in testing some petroleum. On his certificate some 12,000 gallons were seized at the railway

station, but had to be afterwards surrendered when the oil came to be tested by a competent authority.

The Court of Appeal has given a very definite judgment in the dispute between Mr. H. Bollmann Condry and the Condry's Fluid Company. The judges, without hearing the case for the defendant, unanimously pronounced against Mr. Condry, who will have to pay the costs of both actions.

Mr. Hickisson, the proprietor of the famous "Daughter," has obtained an injunction against Mrs. Murphy, prohibiting her use of the title of "Bond" in connection with marking ink. The Court of Common Pleas thus supports the Marriage Bond.

Legal decisions on the Sale of Food and Drugs Act are getting more and more incomprehensible. Generally it must be admitted the vagaries of magistrates have all but one way, but at last we meet with a stipendiary who leaps on the other side. A chemist at Willenhall sold some "Pil. quinia, B.P.," which, it seems, contained only half their proper proportion of quinine. The magistrate refused to convict; he said B. P. might mean anything, and people could take ten pills instead of five. The decimal fraction seems to have been the stumbling block.

We give a fuller report of the important case mentioned last month of a trial under the Sale of Food and Drugs Act for selling soda water not of B. P. strength. The Selby magistrates convicted one dealer whose product contained no alkali, but another, whose bottles contained $3\frac{1}{2}$ grains each, was acquitted, though costs were not allowed. This is very unfair. Soda water was an article of commerce long before the Pharmacopœia took any notice of it, and no one has any right to require Pharmacopœia strength unless he express his desire in the plainest terms.

The treasurer of the British Pharmaceutical Conference reports that he has sold out the Russian bonds in which some of the wealth of the Conference was invested, and transferred the property to Consols. The "Year-Book" for 1877 will be distributed in England, we are informed, before Christmas. The meetings of the Conference for 1878 in Dublin are fixed for August 13 and 14.

Those of our readers who sell agricultural seeds will be much interested in the case reported among our legal information of the conviction of a person who had supplied killed charlock seed for the purpose of mixing with turnip seed. Such a fraud ought to be punishable with imprisonment, as it has been stated that it is so profitable that the principals engaged in the business can well afford the fines.

Under the head of accidents we report a sad one at Sedgley, where a man was killed in a chemist's shop by a lad firing off a loaded gun. Another at Crickehowell, where an immense amount of damage was accomplished in a few minutes through some one putting a light to a quantity of horse powders lying on the counter made of nitre, sulphur, and antimony.

We direct attention to the announcement in our editorial notes that our next volume will contain a translation of a German book, giving analyses of over a thousand secret preparations—English, French, German, and American.

Three Scotch chemists have been fined 12*l.* 10*s.* each at the Danblano Court for selling spirits of wine without a license. In each case the judgment was accompanied by a recommendation that the fine should be remitted as far as possible. One of the chemists had sold methylated spirits also without a license, thereby subjecting himself to a second fine of 12*l.* 10*s.*

M. James S. Hicks deals in our correspondence column with the attitude assumed by the *Pharmaceutical Journal* towards the Temperance Question. The subject of killing dogs and cats continues to excite considerable attention, and the numerous statements of experience which we receive do a good deal to decide the question which first elicited them.

Pharmacalia.

As heroic act of self-devotion on the part of one of the nursing sisters of the Order of Trosses would at any time be worthy of record; still more does it deserve mention here as it adds another fact to the sad history of hydrophobia. Sister S. was in charge of some convalescent children for a walk, when they were assailed by a sheep-dog in the last stage of rabies. Seeing the danger she rushed between the infuriated creature and her charge. She was severely bitten, and the dog in its fury turned upon the children. The poor little things were too terrified to run away, but the true *sœur de charité* threw herself on the mad beast, and for ten minutes rolled over with it, having thrust her fist into its mouth. Some peasants came at last, bent it off, and killed it. The Sister received fifteen wounds on her hands, her arms were lacerated, and an important artery was wounded. Such skilful attention was bestowed that for a short time after her return to Paris there was hope of recovery; but in a few weeks the dreaded symptoms made their appearance, and the nurse, whose heroism had saved five children, died in agony. We need not by words of praise attempt to gild the glory of the deed.

Hydrophobia is unfortunately a current topic of the day. Medical journals and newspaper literature both teem with cases of attack and proposed remedies. The vapour bath seems to promise some reliable results; details of its mode of action and reported instances of its success may be gathered from the daily papers. We note that doubts appear to be cast upon the efficacy of lunar caustic and the actual cautery. We regret this extremely, for both may do good, and they remove the element of fear, the influence of which upon the system no one should despise. Mr. John Moss has written a paper on curara, a remedy for rabies. It is the arrow-poison used by the South American savages. He gives an historical account and describes its preparation, then its properties and antidotes. He combats the notion that the poisonous properties of curara are due to strychnia; so far from that, it has been shown by Vella that each is an antidote to the other. Curarine, well described by Dragendorff, is the active principle. Its best solvent is glycerine, which dissolves 85.2 per cent. of curara when left in contact with it for twenty-four hours and filtered. This obviously would be the best method of preparing it for hypodermic injection; but the solution causes great pain, and it is therefore preferable to use water, in which curara is likewise soluble to the extent of 83 per cent. The dose of curara used solely as a subcutaneous injection may be stated as from a quarter to half a grain. The preparation recommended is one grain of curara dissolved in twelve minims of distilled water.

The University of Cambridge has gained additional lustre by having conferred the degree of Doctor of Laws upon Charles Darwin. Late though the title has been bestowed, it will be welcomed as a fitting recognition of one of the foremost philosophers of his age, and it will be regarded as one of those exceptional distinctions which reflect honour both "on him that gives and him that takes." To eulogize the profound knowledge and splendid power of generalisation of the author of "The Origin of Species" would be a foolish thing. The great mass of the public are competent to seize the broad outline of his investigations; there are few who have the preliminary knowledge to enter into or to criticise his details. Riotous were some of the proceedings on the eventful Saturday when the reception of the new Doctor of Laws took place. The undergraduate forgot that there were bounds within which exuberant spirits should be restrained. The public orator had a hard time of it when, in his choicest Latin, he introduced the candidate. Youth

will have its fling, and we are not disposed to be hypercritical. So let the stuffed baboon, the catcalls and the comic songs be accepted as not intentionally offensive merriment. In one point all will agree, in a sincere admiration for a man who for so many years has laboured in the cause of science, who, with singleness of purpose, has lived only for the advance of truth, and who has presented so fine an example of devotion to the study of the laws of nature.

Those who admire the beautiful in connection with the discoveries of science cannot do better than turn for a moment to the illustrations of the birds collected by Professor Steere in the Philippine Archipelago. They will be found in the last number of the "Transactions of the Linnean Society." The drawings and their brilliant colouring were executed by J. G. Kenlemans, a young Dutch artist, who has struck out for himself the speciality of bird delineation. The paper on the subject is by Mr. R. B. Sharpe, of the British Museum. Professor Steere, while engaged in his task, which resulted in the discovery of forty new species, had more than ordinary perils to encounter. He visited several islands hitherto untrodden by the naturalist, and constantly suffered from severe attacks of fever contracted in Balabac. That was a passing eloud; but he was in chronic danger of pirates, and gathered his specimens in the company of native hunters and their dogs, the latter being indispensable companions to give warning of the approach of the Malays. In the Island of Basilan it was impossible even to bathe under the shelter of the fort without keeping fire-arms at hand for personal defence. We may congratulate the learned Professor both on his courage and on his discoveries.

A sensible and most convenient mode of publication has long been adopted by the Geological Society of London. It consists in printing regularly an abstract of their proceedings, so that the members and the public are kept well informed of the meetings held, the papers read, and the discussions which may have ensued. The little pamphlet in which this information is conveyed is drawn up in a very satisfactory manner. A frequent subject of discussion amongst the directors of our learned societies is in what way the evening meetings, which appeal to the general body of the members, may be made most acceptable. When the matter was urgently brought before the Linnean Society two or three years ago, special allusion was made to the benefit derived from the issue of these published abstracts. One immense advantage is common to the various learned bodies which are in the habit of assembling beneath the roof of Burlington House: they have emancipated themselves from the necessity of continuing their discussions up to an inexorably fixed hour. When there is a short paper there is a short meeting, and the padding which is designed to fill up the interval between 8 and 10 o'clock is omitted. Once set free from the notion that it is necessary to write a sentence or to speak a syllable beyond the requirements of the case, and the whole tone of the evening's deliberations is raised. Now and then it happens that a distinguished *savant* has to bring before his hearers matter of high importance—something that for a lifetime has occupied his attention. Then every seat is filled, and a wonderful audience is collected of representative and distinguished men. No higher compliment can be paid to the lecturer, and no keener acknowledgment of his ability, than the unbroken attention with which his opinions are received. Such occasions are comparatively rare; but when they do take place, who grudges when the hour may have been forgotten by the man? Now and then it happens that the stream runs low and the treasury runs short. We cannot every day invent a telephone, or describe a radiometer. Huxley cannot charm for ever by his research and natural eloquence; Darwin cannot monthly

lead us into newly discovered truth; Tyndall must occasionally be silent; while Sir John Lubbock must have time before he can give us further information about Wings and Stings. Then comes the blessed thought that men who have got no straw are not compelled to keep up an appearance of making bricks. An occasional short scientific meeting is one of the pleasantest experiences, often one of the most useful. With a little tact a man may fairly advance his knowledge in the unrestrained freedom of conversation; and we are bound to confess our indebtedness to the social as well as to the scientific aspect of many of our evening meetings.

These remarks are not in allusion to the Wednesday night conference (December 5) at Bloomsbury Square, but it must be owned that in some respects they might apply. The executive are prayed to recollect that all members do not live in the immediate vicinity of the Inns of Court Hotel, and that there are even some for whom the Metropolitan companies will not make special arrangements. Whilst towards the small hours we reached our modest residence, and were reminded of the commencement of another day by the suburban chemists positively putting up their shutters, we had ample time to reflect on the late proceedings of our society. The first paper read and discussed was excellent, being a discourse by the President, Mr. John Williams, on the preparation of the nitrite of ethyl, which he wished to be understood was not a contribution on the manufacture of sweet spirit of nitre. During this portion of the evening the chair was taken by Mr. G. Webb Sandford. Other papers followed, the shorter ones being read, the rest given in abstract, amongst which latter was a communication by Dr. Tilden on an aromatic Russian oil of turpentine, with further remarks on the same subject by Mr. Postans. We take exception to some of the observations made on the *Rheum officinale* grown in England: not to the remarks themselves so much as to the drawing any comparison between a plant which has only been under cultivation for three years and a root which, under different conditions of soil and climate, has been cultivated for some centuries. We submit that there are scanty grounds for differential estimation. At present we must be content to wait and reserve opinion, or confine our statements to the particular sample of rhubarb under examination. With regard to the colour of powdered rhubarb, we consider that it is no indication of strength or weakness, or of quality, as by mechanical means any sample may be made to assume any shade of colour. The colour of the old Russian variety varied from year to year, and the East India likewise, though to a less degree; but a little laboratory skill, with no admixture whatever, will produce any tint, from dark brown to the brightest yellow. It is, however, a step in the right direction to attempt the acclimatisation of valuable medicinal plants, and from its strong and rapid growth there is a reasonable hope that *Rheum officinale* will repay the care bestowed on it.

A plant with a strange history, and a beautiful plant withal, is figured in the last issue of Hooker's "Icones Plantarum." It is the *Lampra Volcanica* (Benth.), Commelinaceæ. Of this curious plant, says Bentham, only a single specimen is known, which was gathered by Hartwig in the crater of the Volcan de Agua, in Central America, at an elevation of 14,000 feet, in August, 1840. The volcano is near Guatemala. Mr. Salvin, on his last journey to that country, undertook further search but his ascent of the mountain was not at the same time of the year, and no traces of the *Lampra* could be found. As the plant which seems to have chosen so strange a resting place is said to be very ornamental, its introduction to our hot-houses would be desirable.

While on botanical subjects we must not forget to mention the prize founded by Augustin-Pyramus de Candolle for the best monograph on a class or family of plants. Public competition for this is invited by la Société de Physique et d'Histoire Naturelle of Geneva. Manuscripts may be written in Latin, French, German, English, or Italian, addressed, post paid, before October 1, 1879, to M. le professeur Marignac, corresponding secretary, Geneva. The value of the award is 20L., and we see no reason why some of our Major examined men should not compete.

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How a false statement once made continues to be handed down to posterity with a strange vitality of its own is well described by a writer in the *Chemical News*. There is a little Parisian book, published at one franc, called "Agendas Dunod." Like others of its class it gives in a very concise form much useful information on things chemical, the present number (4) being devoted to "Arts and Manufactures." Amongst other things it contains a chapter on the Spectroscope, taken from the "Cours Élémentaire de Physique" of MM. Boutan and d'Almeida. In this is reproduced a passage which deliberately assigns the sole discovery of the metal thallium to M. Lamy. Translated it is as follows, the original being quoted in the *Chemical News*:—"Later, in the month of May, 1862, M. Lamy succeeds by the use of the same method to add to the list a third metal, thallium, which he was able to extract in rather large quantities from the remains of the lead chambers collected in a factory where sulphuric acid was prepared by the combustion of iron pyrites. Before him, it is true, M. Crookes had perceived the special characteristics of thallium in operating on the residues of certain telluriums, but he was not able to isolate it, and even considered this body as a metalloid analogous to selenium or tellurium." M. Dumas, in his report to the French Academy of Sciences, embodies the same gross misstatement (December 15, 1862). A full and direct refutation was conveyed by Mr. Crookes in the *Philosophical Magazine*, July, 1863. Nevertheless, the misstatement (term of euphony), thus contradicted, and also condemned by all the leading scientific men of that day, has been perpetuated in every successive edition of the "Cours de Physique," it is now transferred to a popular manual, and in Mr. Murray's last edition of "Mrs. Somerville's Physical Geography" our English chemist is refused his share of honour. In connection with thallium and the spectroscope, we should mention that the Society for Promoting Christian Knowledge has just issued a shilling manual by Richard A. Proctor, called "The Spectroscope and its Work." It is corrected down to a very recent date, and may strongly be recommended as a clear exposition of the subject of which it treats. The name of the author is sufficient guarantee for the character of the work.

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Now we stand once more upon the threshold of a new year, and the joys and sorrows of the past must fade into the world of shadows. We can but live our day, and try to do our best. Heartily we wish our readers, not the compliments but the realities of the season—a cheerful mind and a hopeful confidence in the future. Not many events of absorbing interest have taken place in pharmacy, and the chemist, in the midst of a bad war and unsettled trade, has pursued his quiet way. The "Pharmacographia," by the light of which now text-books have been written, and which has proved a store-house of information, has sold out its last copy. As yet there have been no tidings of a fresh edition. A French version will perhaps have to supply its place. The "Medicinal Plants" of Messrs. Bentley and Trimen have gained an enviable circulation, and passed into our standard literature. Professor Roscoe has issued his larger "Chemistry," a work which will sustain and increase the writer's reputation. Other treatises of an elementary

character have appeared, and still the truth is manifest that of writing books there is no end. Schools of technical education have arisen on all sides, and there has been an intense awakening in this direction. The British Pharmaceutical Conference has held another session, with the advantage of having its counsels placed under the guidance of Professor Redwood. Two women have knocked at the door of the parent institution, and have been refused admission; neither have been taken, though both, by law established, are grinding at the mill. They have been told to call again next May, when perhaps a more liberal policy may see its way to stricter justice. Mr. Shepperley has called at Westminster, but to his case, which pharmacists may well watch with keen interest, if not with anxiety, we do not here farther allude. The Trade Association might take for their motto, "Facta non verba." They are entitled to the thanks of the whole community for their exertions. We have to note the decided advance made by many of the younger generation of pharmacists in their professional career as chemists. Many amongst them are fully able to enter upon the path of original research and to extend the science of their calling. Finally, we have to thank many correspondents for the interest they have taken in these Pharmacalia Notes. It has been our constant aim to widen the circle of pharmaceutical information, and to allude to various topics bearing on our occupation; and though, advisedly, we have wandered often into other fields, we have never forgotten that pharmacy must claim our first and best attention.

The Chemists' and Druggists' Trade Association.

A MEETING of the Executive Committee was held at the office of the association, 23 Burlington Chambers, New Street, Birmingham, on November 26, 1877, at 1 p.m.; Mr. S. U. Jones (Leamington) president; Mr. Thomas Barclay (Birmingham) vice-president. Present:—Messrs. Andrews (London), Arblaster (Birmingham), Churchill (Birmingham), Croes (Shrewsbury), Delves (Exeter), Earle (Hull), Fairlie (Glasgow), Greenish (London), Jervis (Sheffield), Johnson (Malvern), Reynolds (Leeds), Shaw (Liverpool), Southall (Birmingham), G. Walker (Coventry), R. Walker (Birmingham), and the Solicitor of the Association.

The President said he regretted to announce the death of a member of the committee, Mr. William Laird, of Dundee; he was quite sure all gentlemen present would sympathise with Mrs. Laird and family in their great bereavement.

Letters were read from Messrs. Brevitt, Greaves, Hampson, Wordsworth, and Mackenzie regretting their inability to attend.

The minutes of the Executive Committee meeting held on May 25 last, and of the proceedings of the sub-committees since that date, were read and approved.

The report of the Law Committee was then read, when it was moved by Mr. Reynolds, seconded by Mr. Andrews, and unanimously resolved—That the report of the Law Committee be received, adopted, and entered on the minutes. The report of the Finance Committee was read, and it was moved by Mr. Greenish, seconded by Mr. Shaw, and unanimously resolved, That the report of the Finance Committee be received, adopted, and entered on the minutes. The bearing of the decision in the appeal in the case of The Apothecaries' Company v. Shepperley was discussed.

The solicitor explained that previous to the hearing of the appeal he had several consultations with the counsel retained by the association to argue the case, and they considered it a question of vast importance, not only to the trade, but also to the public at large. They all, especially Sir Henry James, took great interest in the matter, and the result, he was pleased to say, was an order for a new trial of the whole case to be made by writ of *certiorari* to a Superior Court.

Mr. Barclay thought they should express their hearty thanks to Mr. Ghaisyer for the interest, anxiety, and trouble he had taken in the case. The work had been heavy, and he believed the success achieved—they certainly had achieved a success—was due in a large degree to the ability and amount of time he had expended in working up the case.

The Solicitor thanked Mr. Barclay for his remarks, and, in reply to a question, said Shepperley's case would not necessarily rule Wiggins' case. At present the committee had not particulars of the latter case.

Mr. Greenish inquired if the Solicitor knew of any persons able and willing to give evidence as to the practice of chemists and druggists prior to the passing of the Apothecaries Act in 1815.

The Solicitor said four or five gentlemen were willing to give evidence as to the custom of the trade before or about 1815. It would be well to seek for additions, but no doubt others would come forward before the new trial and volunteer evidence. He further said, in reply to questions, that he had written to the clerk of the Apothecaries' Company several months since requesting him to refrain from taking proceedings against other chemists and druggists until the case of the Apothecaries Company v. Shepperley had been decided. The reply he received was to the effect that the Apothecaries Company would give no such undertaking; each case stood on its own merits.

Mr. Southall said that, in his opinion, there was no doubt the County Court judges would postpone the decision in any case coming before them under the Apothecaries Act, pending the new trial in Shepperley's case.

The Solicitor was instructed to take all necessary steps to obtain a definite decision in the Apothecaries Company v. Shepperley.

The Secretary inquired if he should cause a report of the appeal to be printed and circulated to the trade. A resolution had been passed by the Law Committee on the subject; but as the surroundings of the case were somewhat altered since that meeting, he should be glad of renewed instructions; he also asked if he might pledge the association to fight the case through the highest possible tribunals.

The President said the secretary might so pledge the association; and in his opinion, a report of the case should be printed and circulated to the trade.

Mr. Barclay said everyone connected with the trade was interested in the proceedings; and as there had been a very short report in the daily newspapers, he thought it very desirable that the report should be circulated, in order that every chemist and druggist should know the position of the case, and the amount of money the association was spending in defending this great trade question. Such a report ought certainly to considerably increase the number of members of the association.

Mr. Shaw thought the action of the association in the case could not fail to elicit the sympathy of the whole trade.

The Secretary was instructed to prepare a circular, appealing to the trade for support in deciding the question, to be forwarded with a report of the hearing of the case to each chemist and druggist named in "Kelly's Chemists' Directory."

A report of the proceedings of the Scotch Committee was read by Mr. Fairlie, and it was decided on the recommendation of that committee to postpone the whole of the elections of the General Committee for England, Wales, and Scotland until March, 1878. Moved by Mr. Greenish, seconded by Mr. Shaw, and unanimously resolved—

That Mr. James Colquhoun, of the firm of Messrs. H. J. & D. T. Colquhoun, 158 St. Vincent Street, Glasgow, be appointed solicitor to the Scotch branch of the association.

Some considerable discussion took place on sections 14 and 15 of "The Sale of Food and Drugs Act, 1875." It was explained by the solicitor that by the 14th section, it was enacted that a purchase having been made of any article within the meaning of the Act, for the purpose of analysis, the purchaser "shall offer to divide the article into three parts to be then and there separated, and each part to be marked and sealed or fastened up in such manner as its nature will permit, and shall, if required to do so, proceed accordingly, and shall deliver one of the parts to the seller or his agent."

The Secretary said as a rule chemists refused to accept the duly-sealed official sample of articles purchased by inspectors appointed under the Act, and that on more than one occasion the association had been put to considerable expense in endeavouring to obtain sealed samples from the netherities after proceedings had been commenced for alleged adulteration of articles sold. It would be advisable to take steps to so amend the 14th section that it should be compulsory for the official making the purchase to leave a third portion duly sealed in the hand of the vendor.

Mr. Shaw moved, and Mr. Arblaster seconded, a resolution

recommending such a modification of the Act, and referring the subject to the Law Committee to take action when a suitable occasion should arise.

Mr. Barclay thought it would be well to decide upon the place at which the next annual meeting of the association should be held.

Manchester, Leeds, Sheffield, and Birmingham were mentioned, but finally it was—

Moved, by Mr. Fairlie, seconded by Mr. Greenish, and unanimously resolved—

That the Second Annual General Meeting of the Association be held in London, on the third Tuesday in May, 1878.

British Pharmaceutical Conference.

A MEETING of the Executive Committee took place on December 5, 1877, at 10.30 A.M., at 17 Bloomsbury Square, London. Present:—G. F. Schacht, Esq., president, in the chair, Professors Redwood and Atfield, and Messrs. Williams and Thresh.

The minutes of the previous meeting were read and confirmed.

The late treasurer (Mr. Schacht) reported that, in accordance with the instructions given him at the previous committee, he had disposed of the Russian securities of the Bell and Hills Fund, and had re-invested the proceeds in Consols. Also that there had been transferred from the General Fund to the Bell and Hills Fund the sum necessary to raise the income of the latter fund, from Consols, to a clear ten pounds a year. The treasurer's books and documents had been handed to his successor, Mr. Ekin.

THE HANBURY BOOKS.

Professor Atfield reported that in accordance with the wishes of Mr. Thomas Hanbury, and with the instructions of the committee, he had sent a copy of the "Pharmacographia" and of the late Daniel Hanbury's "Science Papers" to the libraries of the Pharmaceutical Associations of Bath, Birmingham, Nottingham, Exeter, Liverpool, Edinburgh, Brighton, Bradford, London, Bristol, Glasgow, and Plymouth, and that he had received very hearty acknowledgments from the officers of the respective societies. A printed statement had been placed inside the cover of each book, explaining that in 1877 Thomas Hanbury, Esq., in memory of his late brother, Daniel Hanbury, F.R.S., presented thirty copies of each of these books to the Executive Committee of the British Pharmaceutical Conference, with the request that a copy of the "Science Papers" and of the "Pharmacographia" should be given to the library of the Pharmaceutical Association of every one of the fifteen towns in which the Conference had already met, or where it would assemble during the succeeding fifteen years.

Dr. Alfred Senior was appointed assistant secretary, at a salary of 40*l.* per annum, to commence from November 1, 1877.

The senior secretary was instructed to write to Mr. Siobold as soon as the editorial work for the current year was quite completed, offering him the editorship for the year 1877-78, on the following terms:—

1. That the salary be 150*l.*, payable when the completed volume is issued by the printers.

2. That the manuscript of the "Year-Book" be placed on the table at the annual meeting at Dublin in August, 1878, complete in every respect excepting the introduction.

3. That the introduction be completed and forwarded to the printers on or before October 1, 1878.

4. That no manuscript be interpolated in the printed proofs without the permission of the president or one of the general secretaries.

Professor Redwood proposed, and Mr. Thresh seconded, a resolution in accordance with the five previous paragraphs.

Professor Atfield submitted a proof of a circular of invitation to membership, proposed to be sent to all persons interested in pharmacy in Ireland, provided such action met with the approbation of the Irish committee now being formed to promote the success of the meeting in Ireland in August, 1878. The committee accepted the proof, and ordered copies to be printed and circulated, subject to the wishes of the Irish committee.

The secretaries submitted an account of receipts and disbursements since the previous meeting of committee.

The Pharmaceutical Council.

ONLY 15 members were present at the December meeting. Messrs. Brown, Cracknell, Hampson, Hanbury, Owen, and Rimmington being absent. The first business was the appointment of examiners. On the English Board, Mr. Haselden retired, and was replaced by Mr. Henry B. Brady, of Newcastle-on-Tyne; on the Scottish Board, Mr. Buchanan, of Edinburgh, retired, and was succeeded by Mr. Alexander Noble, of 139 Princes Street, in the same city. Mr. Haselden, it was mentioned, retired on account of ill health.

It was resolved that the examinations should be held during 1878 in February, April, June, July, October and December in England, and in February, April, July, October, and December in Scotland.

Mr. Hills said he hoped it would not be forgotten to arrange for a deputation from the London Board visiting the Edinburgh examination. Some little difficulty, it appeared, had been occasioned lately by the London Board having passed a regulation denying to candidates who had failed information as to the subjects in which they had proved deficient. The Scottish Board, not having been informed of that regulation, had gone on giving the information as before, and Mr. Mackay thought it only fair that it should be given.

A letter was read from the Glasgow Chemists' Association, signed by the president and secretary, expressing as the unanimous resolution of the council of that association, the opinion that the Preliminary examination as at present conducted "was too severe as an entrance qualification to the trade, and that if such a standard be continued great difficulty will be felt in securing apprentices." The secretary, in reference to this, showed by figures that the general percentage of failures was actually lower since the questions had been set by the College of Preceptors than it had been for several years previously, though in 1877 it was higher than it had been in 1876. Mr. Atkins thought if lads would pass this examination immediately on leaving school they would find it easier than if they waited a few years. Mr. Mackay said the leading pharmacists in Edinburgh had for some time refused to bind an apprentice until he had passed this examination. Mr. Gostling considered the examination not at all too severe. Mr. Churchill knew the feeling as to the difficulty of obtaining apprentices existed, and thought the alleged severity of the examination ought to be considered. On the suggestion of Mr. Schacht, however, it was resolved to write to the Glasgow Council, showing them the statistics as stated by the secretary. He considered the memorial had been written under a misapprehension.

A letter from the Privy Council was read, stating that the proposal to place chloral hydrate and its preparations on the poison schedule was still under consideration.

On a proposal by the Finance Committee to invest 2,000*l.* in 3 per cents., Mr. Sandford moved that 500*l.* should be transferred to the Bencvolent Fund. The president considered, however, that the society ought to save money with a view of some day securing a freehold home for itself, and Mr. Bottle opposed Mr. Sandford's proposition on the ground that such a grant would be likely to check subscriptions. Mr. Sandford withdrew his motion for the present.

The Council afterwards considered in committee the question now pending between the Society of Apothecaries and chemists and druggists respecting counter practice, and after some discussion it was adjourned to a future meeting.

THE PHARMACEUTICAL SOCIETY AND PROVINCIAL EDUCATION.

A paper read, before the Glasgow Chemists' and Druggists' Association, by Mr. J. M. Fairlie, vice president, on December 12, 1877, Mr. D. Frazer, president, in the chair.

MR. Chairman and Gentlemen,—It seems to me that the question of provincial education, having now been in abeyance for a few years, should be brought to the front and dealt with in a statesmanlike manner by the council of the Pharmaceutical Society, and as our esteemed chairman has requested me to read to you a paper in lieu of his inaugural address, I have thought I could not take up a better topic. It will be necessary that we should take a brief glance at the past in order that we

can realise our present position and make our calculations for the future. First, then, the Pharmaceutical Society in its original programme had the education of its apprentices or students as one of its chief objects, and to that end a School of Pharmacy has been in existence for many years, and no one denies but that through its able professors it has done good service to the cause of pharmaceutical education. Some say that it has been at too great expense that it has been kept up, but I am disposed to think that all the money that has been spent upon it has been well spent, and I believe that if the same amount was spent again, in a similar direction, far more good would result in the future than has been done in the past. I am aware that some of our leading pharmacists held the view that the time has almost come when the society should cease to have any control over the education of the students at all, and they look upon it as an anomaly that the society should both be a teaching and an examining body. I hold that this view should not be entertained for a single moment in present circumstances. If such a step is taken, it will be to my mind a retrograde one and opposed to the principles adopted and carried out by most other bodies having duties and responsibilities placed upon them of a nature similar to those of the Pharmaceutical Society, aye, even and carried out by the Government itself; for what is our present system of national education? Is it not controlled by the State? Are the teachers and taught alike not examined and inspected by the State? Yes, and the State also pays a large share of the expense! Why, then, should there be an outcry against the society exercising some control over this important matter? I suppose it is almost wholly on the ground of expense. This, I think, is short-sighted policy. Some people do not know how to spend a shilling that they may receive eighteenpence. Others, again spend eightpence, and scarcely receive a shilling's worth of value in return. Looking at the past of the Pharmaceutical Society, I am not disposed to criticise too severely the conduct of the old leaders at Bloomsbury Square, many of whom are now lying in honoured graves; and I do not know that had I been placed in the same circumstances I would have acted otherwise than they did; but standing as we are now on a higher platform, we can survey the past from a different standpoint, and while I give all honour to the Bells and the Allens, the Hanburys and the Morsons for their life-long efforts in the advancement of pharmacy, yet I cannot but think that had all the time and money and effort that was put forth year after year in endeavouring to obtain an Act of Parliament, been spent in spreading useful knowledge amongst chemists in the country districts, and by establishing in all the large centres schools of Pharmacy on the model of that at Bloomsbury, much more good would have resulted. There would, I am sure, have been less jealousy and distrust amongst the different sections of the trade, and a better Act of Parliament would have been obtained, when not only the trade but the country would have been ripe for the kind of legislation necessary. But there is no use looking at the past unless to conserve those good and useful legacies that have been handed down to us by our predecessors, and to improve upon that which we are convinced needs improving. And I look upon the School of Pharmacy at Bloomsbury Square, and its scheme of education as conducted there, as one of the most important of those legacies. But it is well known that all students cannot reach London to obtain the necessary tuition, and at present it is impossible, even in our own city, with all our educational advantages, for any young man to receive the systematic course of training necessary to equip him properly for the work he should pursue in after years in connection with his business. I have already hinted that I think that in the past the provinces have been neglected by the authorities in connection with our society at London. I am aware that a scheme exists whereby local associations may obtain grants of money and loans of books and apparatus under certain conditions and restrictions, but I am disposed to think that the restrictions are either too severe, or the grants that have been given have been so paltry on the whole, and given with such a grudging hand, that local committees think twice before they make any application at all. The members of council of late have thought they had nothing to do in this matter but promulgate a scheme, and let it work itself; they passed, so to speak, a permissive bill, but they hemmed it round with so many whys and wherefores that it has practically become a dead letter. What would the people have said if our Government, when they passed the Education Bill, had they left out the provision for the appointment of School Boards in

the various parishes and burghs throughout the country? Would education have been any further advanced to-day? I am sure not, and this is just what our council did a few years ago. They, in effect, said, "we will lay aside a moderate sum for provincial educational purposes, for we acknowledge that we must do something in this matter. We obtain a good deal of money from provincial members of the society, and we must keep them on and get others to join, to send up their guineas also; and although we send them seventeen shillings' worth of journals every year, yet we get a profit, and we cannot keep it all in London. But we know our country cousins well enough; they are very slow to move, very conservative, so we will not make this money too easy to get at, for they may, after all, make a bad use of it, and it is far better that we should buy a few more 3 per Cents. than that it should be sent to Birmingham, or Leeds, or Glasgow to be squandered there, when we would never see it more." This, though a little strained, is practically what they said and have carried out. No local committee would be troubled in the way that is laid down in the scheme. What is required is some simple plan, something that we have been accustomed to in other departments of life, not a new-fangled, intricate scheme, that will take a man half a lifetime to master. It seems to me that there are many plans that should commend themselves to us for their very simplicity. When the hero of the Scottish Reformation accomplished his purpose by overthrowing the tyrant power which tried to crush the Scottish people, he did not attempt to dazzle the inhabitants by promulgating some perplexing scheme for keeping down the old powers, and improving the habits of the people, but he adopted the very simplest plan he could, and in doing so he carried the people with him. He established a school in every parish alongside of the church, and for 300 years Scotland has stood a monument of John Knox's sagacity and forethought. The plan I would propose is perhaps not new. Something like it has certainly been suggested by some one, but if simplicity is a recommendation I think it possesses that element:—First, let the country be divided into, say, 12 districts; second, let the members of the society in each district elect, every three years, an Education Board; third, let the council, at the commencement of each year, set apart a certain sum of money for aids to education, say 600*l.* the first year, thus giving a grant of 50*l.* to each of the 12 districts, which ought to be supplemented by at least an equal sum subscribed locally. By this means the Education Board would be able to secure two lecturers who would willingly accept the fees obtainable from the classes set a-going, and the bonus of 50*l.* each might go in providing either room accommodation, apparatus, or some other necessary matters that would occur to the Board. This plan, I think, has several points in its favour. The issuing of the ballot papers every three years would add an interest on the part of the members of the society which they could not otherwise take in this matter. The Board, once elected, would require to do something in the furtherance of education, or of course the grant would not be paid. The fact of classes existing in a district regularly from year to year, and not in the spasmodic way in which some local associations find it necessary to carry them on at present, would become known to all young men within each radius who would naturally strive to attend one or two sessions. The objection of course would come in, where is the 600*l.* to come from? So far as I can calculate of the income and expenditure during the past few years I think the society might well afford 600*l.* or 700*l.* annually for educational purposes, apart from its endowments at Bloomsbury Square. If we take Scotland alone, as an example, two districts in addition to the N.B. branch might answer for the present. We find that during the past year the Scotch Examining Board made a clear profit of 100*l.* to the society, apart, no doubt, from those who would become annual subscribers as members afterwards. Thus we, in Scotland, would be but receiving back for educational purpose the excess of income on the examinations, which I hold to be but fair and just, as I do not think the society should make a single penny of profit out of the hard-earned fees that are paid by the students who present themselves for examination. I am not aware whether the English Examining Board is as profitable to the society as the Scotch one. I should fancy it ought to be much more so, as a larger number of students must present themselves at London in proportion. The money difficulty might come in, however, apart from this; but there seems to me to be other ways and means of raising the necessary sum, for as the old saying has it: "Where there's a will there's a way." I would like, for instance, to know whether

it is absolutely necessary that all members and Associates, subscribing on an average, I presume, about 15*s.* per head per annum to the society, should receive 17*s.* 4*d.* worth of journals every year in return. It seems to me that the society pays heavily for this practically gratis distribution of the journal. If it was put upon an independent basis, I am strongly of opinion that it would, in the first place, pay better than it does even at present; and in the next, I am certain its editorials and leaders would more fairly represent the opinion of the majority of the trade, and have more independence about them, while its articles generally would be more in keeping with the stage of progress attained by the great bulk of its readers. We need the journal; we must have at least one highly scientific publication, and no doubt we would get one or more whether it was continued to be sent out by the society to its members or not, and the trade would willingly pay for it or any other journal, and I do not see why the society should care to monopolise this particular department. I therefore think that if it is necessary to make any sacrifice for the sake of the funds of the society, that the education of our youths should not be neglected or left to itself, but that if a "Jonah" must be thrown overboard, let the *Journal* go to fight its own battle with other enterprises of a similar character. This, no doubt, will sound in the ears of some of our friends as a terrible proposal. I think I hear them say, "We can't do without our official organ; we must have some means of reporting our council meetings, and we can only allow our own trusted editor and reporter to sit at our side, for it does not do to let the whole world know all that is going on inside." What would the country say if the Houses of Parliament and our town councils were to close their doors against the representatives of the Press, and only permit a trusted servant to provide the reports to the nation. It would not be tolerated a single day, and why the members of the Pharmaceutical Society have submitted to this indignity so long is more than I can understand! There is another common objection often raised against the adoption of a thorough scheme of provincial education, namely, that of the smaller towns. If, say, a grant of 50*l.* was made to Glasgow, why should the pharmacists in Greenock or Perth not also establish a little school and get a share of the grant? Looking at the question as a matter of common fairness, one naturally would say, "They are entitled to it, and if they can get up a school, let them elect a board and give them a share of the grant." But I have no great fears of the smaller towns interfering with the grant in this way. Throughout the country there are certain recognised centres, just as London is looked upon as the leading city in the empire. There are always inducements to young men to go from the smaller towns to the larger and more attractive ones, and while a system of teaching would be an additional attraction to the larger towns, I do not think it would militate one iota against the interest of the pharmacists in those outlying towns. I rather think that the advantages are all the other way; each district would be placed upon an equal footing. They would elect their own board, which would superintend the arrangements in its own way. The Pharmaceutical Society could have a check upon the board by having the power to place the local secretary *ex officio* a member of the board, at the same time a guarantee would be required to be given by the board that the grant should only be used for educational purposes. Thus the Pharmaceutical Society having laid the foundation, and placed the edifice of provincial education on a fair basis, it might rest on its oars in that department and watch results for a time with perfect safety, but only, I should say, for a time, for a higher power may step in and rearrange matters. And I fondly look forward to the time when our youth shall be apprenticed until he has passed his "Preliminary" examination, when the "Minor" examination shall be the test for assistantships alone, and the "Major" the only portal by which a pharmacist shall be able to commence business on his own account. Then our young men shall be looking for their education within the walls of some of our local universities and science colleges, and by that time, I trust, that in each of these halls of learning a chair of pharmacy may be established and endowed, partially by the Government, partially by the Pharmaceutical Society, and partially by local effort.

And now in conclusion, let us look at our own position as a local association. Are we prepared to enter upon some such plan as I have here sketched out? We are certainly more peculiarly situated here than in any other district, and there is the more necessity for something being done, and that quickly. Our

spasmodic efforts have been quite as successful as might be expected in the circumstances, but we have had no system, and where there is no system there is not that thoroughness without which our efforts are practically worthless. I know from my intercourse with the young men that they are anxious for something being done. I know also that there are teachers in the City able and willing to give their services if the smallest encouragement, such as a grant from London would give, were forthcoming; and I believe, further, that the employers have but to be appealed to to give what assistance is needed in furtherance of such a scheme. I do not see why in a city like Glasgow at least 100% should not be subscribed annually for the upkeep of a set of classes in conjunction with a library and museum. I know what our young men can do when they make up their minds. But for them no library, I believe, would yet have been in existence in connection with our association. But for them the business hours would have been kept stretched out much longer than they are. And I am convinced that in this matter they have it pretty much in their own hands also; and as it is the young men who will mainly benefit by such a reform, I would say let them keep steadily in view the ideas associated with three words, namely, Educate! Unite! Progress!

Provincial Reports.

COVENTRY.

AN association of chemists and druggists has been formed at Coventry, under the title of the Coventry and Warwickshire Pharmaceutical Association. The first president of the association is Mr. Councillor Wyley, and the honorary secretary Mr. Frederick Barrett.

DOVER CHEMISTS' ASSOCIATION.

THE annual meeting of this association was held at the Apollonian Hall, on Nov. 14. The balance sheet was presented and passed, and an opinion was expressed by the chairman and others that the working of the association, especially with regard to the maintenance of uniform prices, had been satisfactory and beneficial. Messrs. W. H. Cotterell and J. F. Brown were reappointed as chairman and secretary, respectively, for the forthcoming year. After the business had been dispatched, the members present sat down to an excellent supper.

In proposing the health of the Mayor and Corporation, coupled with the name of Alderman Bottle, the secretary remarked that whatever success had been attained by their association was very largely due to that gentleman's kind advice and assistance, which he had always placed at their disposal. Other toasts were drunk, and a very pleasant evening was spent.

EDINBURGH CHEMISTS' ASSISTANTS' SUPPER.

THE chemists' assistants of Edinburgh held a supper (which they propose shall be annual) on the evening of Thursday, the 6th inst., in the Windsor Hotel, Princes Street. Covers were laid for upwards of 100. Mr. John Young (Messrs. Macfarlan & Co.) occupied the chair, and was supported by Dr. Taylor, Dr. Aitchison and Dr. Linton. Messrs. Taylor & Simpson, a deputation from the Glasgow Chemists' Assistants' Association, and Mr. James Johnstone Taylor, Messrs. Cairncross & Welsh acted as croupiers. After supper the chairman gave the usual loyal and patriotic toasts which were enthusiastically responded to, that of the "Army, Navy, and Volunteers," being acknowledged by Captain Watson. In proposing "Success to our Annual Gathering," the chairman referred to an attempt to inaugurate an annual social meeting, such as the present, made in 1873, but the movement at that time fell through. On the present occasion, however, all this was changed; the preliminary meeting was so enthusiastic and the call so cordially responded to that had it not been that arrangements for the present room had been made and the accommodation thus limited, double the number of tickets might have been sold. In alluding to the present condition of the Chemists' Assistants of Edinburgh, he

stated that as a body they were not only far behind those of London and the larger provincial English towns, but also those of Glasgow and the West of Scotland. He hoped that now they would "gird up their loins and put their armour on," and waking out of their lethargy organise a permanent association, which he trusted would, by bringing them into contact, make them a more united body. Before concluding he welcomed the deputation from Glasgow, and acknowledged the kind support given by the medical gentlemen present.

Mr. Welsh proposed the "University and Royal College of Physicians and Surgeons."

Dr. Taylor in replying said that an overworked doctor was the worst speech maker; he had no command of language, his usual vocabulary consisted of about 40 words. His favourite phrases were something like "What do you complain of?" "How long have you been ill?" and so on, all day and every day repeating the same list. Again, it had been said that the less a doctor said the more he was thought of; this made him taciturn, he therefore apologised for any disappointment his speech might cause. He would like to ask the chairman to explain how he considered the Edinburgh assistants were so much behind others. He had always thought that the Edinburgh chemists and their assistants were unequalled for intelligence and accuracy in this country and in the world, and whatever it might be elsewhere he knew that in this city a physician writes a prescription with the faith that his instructions will be carried out to the letter, and if it should happen that he makes a slip, a nice polite young man calls to point out the error and get it rectified, and meantime the customer is told that the prescription will take some time to make up. He concluded in referring to the University by wishing peace and prosperity within her walls, and expressed a hope that her present *prestige* would not be lost, but that she shall go on and flourish continually.

Dr. Aitchison, in acknowledging the toast on behalf of the Royal College of Physicians and Surgeons, said that he represented what in England was looked upon as a person who did not exist, namely, a Scotchman who had lived in England and had found his way back to Scotland again, and so, having some experience of English practice, he would like to say a word on that subject. The general practice in England, at least in the provinces, was that every doctor should be his own druggist. He while there kept his own drugs, and might say so without much shame. He did his own dispensing, but he owned that he did it badly. In the town in which he was located there were thirteen practitioners; the leading man was a gold medalist of the London University, a B.A. and M.D., and had been a member of parliament, and this doctor also sold his own drugs. From his (Dr. Aitchison's) experience of the system, he must say that it was thoroughly bad, both for the doctor and for the general public, and he was very pleased to find that this practice did not prevail in Edinburgh. It is a retrograde movement. At the same time he must say that the Edinburgh chemists got as much for their medicine alone as did the English prescribing druggist with his advice, or, for that part, as much as the doctors in most cases got for the same.

Mr. William Inglis Clark (Messrs. Duncan, Flockhart & Co.) in proposing the North British Branch of the Pharmaceutical Society, said he could not speak of the founders except so far as he had been made familiar with them from books or from hearsay. Among those founders was the late Mr. Duncan, to whom they had owed much. He had revolutionised the practice of dispensing. At the time when Mr. Duncan went to the business ointments were sent out in mussel shells, and pills and powders in odd scraps of paper. He inaugurated a new system, and though by many it was considered a dangerous experiment, yet the experiment turned out a success, and showed the master mind. This was not Mr. Duncan's only improvement. Among his formulæ should be mentioned that for citrine ointment, which was retained in the present Pharmacopœia. Among founders and contemporaries of Mr. Duncan he would mention Mr. Robertson, George Street, and the late Mr. Flockhart. The year 1843 witnessed the formation of the North British Branch. At that time and since Mr. John Mackay has spared neither time nor trouble in organising the chemists into a harmonious and influential body.

Mr. Robert Stenhouse acknowledged the toast.

Mr. Cairncross proposed the "Glasgow Chemists' Assistants' Association," to which Mr. Simpson replied.

The meeting was of the most harmonious description, and broke up about 2 A.M.

GLASGOW CHEMISTS' AND DRUGGISTS' ASSOCIATION.

THE opening meeting of the winter session was held in the Manager's Library, Andersonian College, on December 9, Mr. Daniel Frazer, the president, in the chair. The minutes of the previous meeting were read. Mr. John Walker was appointed secretary, and Mr. Wm. Mackenzie librarian, *vice* Messrs. J. L. MacMillan and Jas. Murdoch, resigned. A donation of books from the Pharmaceutical Conference was acknowledged with thanks. The President made some remarks which resulted in a resolution "that the Council of the Association should consider the desirability of approaching the Council of the Pharmaceutical Society with reference to the preliminary examinations." The general idea was that the examination was so hard as to make it exceedingly difficult to obtain apprentices.

Dr. J. M. Milne, lecturer on chemistry, read a paper entitled, "Some notes on the application of chemical knowledge." He traced the growth of chemistry and the advance of its practical applications to the arts and manufactures. He insisted on the great value of a knowledge of practical chemistry to the chemist and druggist, and in conclusion discussed the Adulteration Acts. A vote of thanks to the lecturer closed the proceedings. The following classes were announced for the coming session:—

Tutorial class for the preliminary examination, conducted by Mr. A. Fairlie, and meeting on Monday and Friday evenings at 8.30 P.M. Fee, 10s. 6d. per session.

Theoretical chemistry class, conducted by Dr. Milne, meeting on Tuesday at 8.30. Fee, 5s.

Practical pharmaceutical chemistry class. Fee, 21s.

The second meeting was held on the 12th inst., when a paper was read by Mr. J. M. Fairlie, "On Provincial Pharmaceutical Education," which we print elsewhere in this number.

ASSISTANTS' SECTION.

The opening meeting of the session was held on November 14 at Anderson's College, Mr. Peter Boa, president, in the chair. The minutes of the previous meeting were read and confirmed. Mr. Walter Paris was elected secretary in place of Mr. J. S. Whyte, who had left Glasgow.

Mr. Boa read a paper on "Salicylic acid," in which he mentioned that powdered tragacanth answered well for suspending the acid in water. Pills of salicylic acid could be made up with tragacanth and glycerine, taking care to avoid excess of the latter.

Mr. Taylor moved a vote of thanks to Mr. Boa, which was cordially responded to.

Mr. W. Simpson, convener of the early closing committee, reported that the efforts of the committee to obtain a reduction of Sunday hours had been only partially successful.

Mr. Boa tendered his resignation of the office of president, as he was leaving the city. A few members were elected.

The next meeting will be held on December 19, when Mr. W. Paris will read a paper on "Phosphorus."

MIDLAND COUNTIES CHEMISTS' ASSOCIATION.

THE quarterly meeting of this association was held on Friday, Nov. 16, at Burlington Chambers, Burlington Arcade, New Street; the president, Mr. W. Jones, in the chair. There was a good attendance of members and associates. The secretary was called upon to read the quarterly resume of pharmaceutical news. Some discussion ensued and doubts were expressed whether Spt. Aether. Nit. of B.P. strength must always be sold for sweet nitre; the question was, however, decided in the affirmative.

The president then called upon Mr. H. W. Jones for his paper upon—

SOME REMEDIES RECENTLY INTRODUCED.

The following remedies among others were referred to.

Acid. Hydrobrom. Dil.—This was stated to be a somewhat unsatisfactory preparation when made according to the original formula of Dr. Wade, as it invariably deposits on keeping. A better process was that of C. Rice, which had appeared in "New Remedies," in which alcohol was added in order to precipitate more completely the acid tartrate of potash, the alcohol being afterwards removed by distillation, and the acid brought to the s.g. of 1.075 containing 10 per cent. of HBr. The sample ex-

bibited had been made from recently distilled acid prepared by the action of bromine on phosphorus, the portion being used that distilled over nearly colourless. It was remarked that a perfectly colourless acid could be easily prepared from the distilled acid, and when the strong acid had become discoloured it could be decolourised by a little sulphuretted hydrogen; hence would then remove excess of gas, and filtration the deposited sulphur.

Liq. Ferri Dialysatus.—The sample shown had been made from 300 parts of liq. ferri perchlor. and 100 parts of liq. ammonia, of s.g. .92, as proposed by Dragendorff. Highly basic chlorides of iron had been prepared previous to 1861, when Graham obtained a solution containing ninety-five molecules of oxide to one molecule of chloride; a solution containing the oxide in this proportion, as that experimentalist had shown, would not keep, so that for pharmaceutical purposes a decided though relatively small amount of chloride would have to be present. This, however, should not be looked upon as an excuse for using a bad preparation, or such a solution as would, without the iron being first precipitated, show the presence of a chloride with a solution of silver.

Salicylic Acid.—Although classed among the less recently introduced articles, was noticed from its important uses in medicine. The three kinds were shown; the precipitated acid, the crystalline, and the chemically pure acid obtained by dialysis.

Guarana.—Specimens were shown in the roll and in the powder. A number of specimens had been examined by the speaker, but none found adulterated. In one case a number of minute metallic fragments were visible by means of a lens, which, on examination, proved to be metallic lead; the total amount was small, and its presence seemed to be accidental, and not added with a view to adulterate. The sample was in fine powder and not in rolls as usually imported.

Monobromated Camphor was then exhibited, and the mode of manufacture explained; the dispensing difficulty was also referred to. The speaker thought that an Emulsion Syrup could be prepared by dissolving the camphor compound in spirit, precipitating by water, collecting the finely divided monobromide and mixing it with cold syrup. By this means a sort of emulsion could be made, and although it separated, the camphor compound floating to the surface, still it could be readily diffused again by shaking.

In treating of *Chrysophanic Acid* it was said that while the method of heating was to be greatly preferred to the use of benzine in making an ointment, yet a smooth ointment was not obtained by dissolving the acid in the hot fat, but by rubbing down after cooling a satisfactory preparation resulted.

Nitrate of bismuth and its glycerole and a few other preparations, brought the paper to a close.

Mr. Dawson then explained a simple and ready method by which the absence of alum as an adulterant of cream of tartar, could be ascertained. He said that since alum, if present as an adulterant, is always found in considerable quantity, it could be detected by the simple process of agitating forty grains of the cream of tartar with 3ij. of cold distilled water, filtering off the fluid and evaporating it to dryness. In consequence of the sparing solubility of the acid tartrate, the dry residue would weigh less than one grain if the cream of tartar be free from this adulterant, but much more * if it were present; thus, if the residue weigh less than one grain, the absence of soluble salts as adulterants, may be inferred, though they may be present in small quantities as impurities.

A vote of thanks to Mr. H. W. Jones for his interesting paper brought the meeting to a close.

A *soirée* in connection with this association is to be held in the Town Hall, Birmingham, January 23, 1878. There will be several attractive features. Messrs. Cleaver & Sons, of London, will manufacture fancy toilet soap by a new process. The machinery used will be driven by a gas engine. The same firm will also exhibit the filling and closing of collapsible tubes of perfume. The Royal Porcelain Company, Worcester, will practically illustrate the manufacture of china: several of their workpeople will be engaged. Several chemical and pharmaceutical processes will be conducted. The telephone will be exhibited in the hall, and a great number of novelties, &c., will be shown. There will be an organ recital, and a string band will perform at 10 o'clock, when dancing will commence.

* This residue of course being examined for alumina.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.

On Thursday, November 29, was held a very successful meeting of this association, the president, J. H. Atherton, F.C.S., in the chair. The minutes of the preceding meeting were read.

Donations of 5*l.* from Mr. Edward Harvey, of London, and of Hanbury's "Science Papers" and "Pharmacographia" from Mr. T. Hanbury, were announced. A vote of thanks was accorded to both these gentlemen.

The president then gave a telling address, impressing his hearers that not only money but personal support was necessary to maintain the association in an efficient condition. The question, Shall the association continue? was then put to the meeting, and answered unanimously in the affirmative. Messrs. James Beardsley, C. W. Dixon, Bolton, Warriner, and others, spoke strongly in favour of the association. Messrs. James Beardsley and R. and W. Widdowson, three former students, offered to assume the post of teachers, and warmly acknowledged the benefits they had received from the association.

A vote of thanks to the president, proposed by Mr. Inger and seconded by Mr. Moore, brought the proceedings to a close.

PHARMACEUTICAL SOCIETY OF IRELAND.

THE monthly meeting of the above society was held at the College of Physicians, Kildare Street, on Wednesday, December 5, Sir D. J. Corrigan, president, in the chair. The following were present:—Dr. A. Smith, vice-president; Mr. Wm. Allen, Mr. J. G. Bileau, Dr. Collins, Dr. Frazer, Mr. J. Goodwin, Mr. Wm. Hayes, Mr. E. M. Hodgson, Mr. J. T. Holmes, Mr. S. Oldham, Mr. Payne (Belfast), Dr. Ryan, and Professor Tichborne.

A communication was read from Mr. Taylor, acting clerk to the Privy Council, Dublin Castle, stating that certain bye-laws passed by the council had been approved, and appeared in the *Dublin Gazette*.

Several letters were read from correspondents who had failed at the examinations and from others, asking for some relaxation of the regulations. In all cases the registrar was instructed to reply, stating that their requests could not be complied with.

On the motion of Mr. Payne, a committee was formed for the purpose of reporting to the council if it should be desirable to have any of the resolutions of the council inserted in the calendar of the society.

The following notice of motion by the president appeared on the summons of meeting:—

"To consider the expediency of issuing a notice, by public advertisement or otherwise, with this purport, or as follows:—

"I am directed by the President and Council of the Pharmaceutical Society of Ireland to draw attention to the Pharmacy Act (Ireland, 1875), which was enacted in that year to protect the public from the dangers that would accrue from incompetent or ignorant persons compounding medical prescriptions, and which enacts that persons not duly qualified to compound medical prescriptions are liable to a penalty of 5*l.* for each offence.

"The President and Council of the Pharmaceutical Society, impressed with the importance of carrying out this law for the safety of the public, desire to make it generally known, that all persons who might otherwise plead ignorance of the law may be aware of the provision of the Pharmacy Act (Ireland, 1875), which enacts as follows, in Clause 30:—That it shall be unlawful for any person to keep open shop for retailing, dispensing, or compounding medical prescriptions, unless he be registered as a pharmaceutical chemist, or otherwise duly qualified; and if not so qualified shall "for every such offence be liable to pay a penalty of five pounds;" and Clause 36 provides that "every penalty recoverable under the provisions of this Act shall be recoverable in a summary way with respect to the police districts of Dublin Metropolis, and with respect to other parts of Ireland before a justice or justices of the peace sitting in petty sessions," &c., &c."

Mr. Holmes said he had an amendment to propose—viz., that in any advertisement issued by the council the whole of Clause 30 of the Act should be inserted, and pointed out in the president's notice of motion what he considered important discrepancies between it and the clause whereof it appeared to be an epitome. The words "sell or" were omitted before the words "keep open shop for," and the words "medical prescriptions"

were inserted after "compounding" instead of the word "poisons." The amendment was seconded by Mr. S. Oldham. After considerable discussion the vote of the council was taken, and the motion suggested by the president, with some unimportant modifications, was carried by a large majority. The following was elected to membership:—William F. Wells, jun., Upper Sackville Street, Dublin.

CHEMISTS' AND DRUGGISTS' ASSOCIATION OF IRELAND.

At a meeting of the Chemists' and Druggists' Association held on Monday evening, November 19, it was resolved, as the objects of the society had been accomplished, to dissolve the association.

It was also unanimously resolved that a committee be appointed to consider the best means of expressing the thanks of the association to Mr. Hayes, the hon. secretary, who, during the whole of the society's existence, had so efficiently carried out the duties of the office.



THE COUNTER-PRESCRIBING CASE.

(Special Report.)

At sittings in Banco, in the Court of Exchequer, at Westminster Hall, on November 20, 1877, before the Lord Chief Baron (Sir Fitzroy Kelly) and Mr. Baron Cleasby, the case of George Shepperley, appellant v. The Master, Wardens and Society of the Art and Mystery of Apothecaries of the City of London, respondents, was heard.

This matter, which relates to the question of counter-prescribing, came before the court on appeal from a decision of the judge of the Nottingham County Court, by which the appellant had been mulcted in penalties for having infringed the provisions of the 55 Geo. III., cap. 194, sec. 20.

The nature of the action and the circumstances attending it will be apparent from the arguments of counsel in the case.

Sir Henry James, Q.C., Mr. Buszard, Q.C., and Mr. Clement Higgins appeared for the appellant. The respondents were represented by Mr. Day, Q.C., and Mr. Stangie.

SIR HENRY JAMES: My lords, this is a special case stated by a learned County Court Judge. It raises a question of considerable practical importance as to how far any person practising or carrying on the business of a chemist and druggist may exercise a discretion when selling medicines across the counter to his customers. That is the main point to be determined.

THE LORD CHIEF BARON: For whom do you appear?

SIR HENRY JAMES: I appear for the appellant.

THE LORD CHIEF BARON: Who is the appellant? Is he convicted?

SIR HENRY JAMES: Yes, he was convicted, and penalties were inflicted under the Act of Geo. III., but the learned Judge of the County Court felt that it was no ease for the determination of a superior court, and has therefore stated a special case, upon which the appeal now comes before your lordships.

My lords, to direct attention to what is the matter for your determination, I will say generally that the question is how far a chemist and druggist, who, in the course of his dealings across the counter, sells certain drugs or wares in the conduct of his business, and who to a certain extent in the selling of those drugs and wares exercises a discretion as to the articles he sells, practises as an apothecary so as to bring him within the penal clauses of the Act of Geo. III.

The case, my lords, is stated as follows:—"This action was brought by the Master, Wardens, and Society of the Art and Mystery of Apothecaries of the City of London against the appellant, the defendant, who is a chemist and druggist, carrying on business at Nottingham, within the jurisdiction of the

Nottingham County Court, to recover from him the sum of 20*l.*, under and by virtue of the 55 Geo. III., cap. 194, sec. 20, for that be, not being a person who, on the first day of August, 1815, was actually practising as an apothecary, did, on August 22, 1876, and on divers days within six months next before the commencement of this action, act and practise as an apothecary, in the town and county of Nottingham, by then and there, as such apothecary, attending, and advising, and furnishing, and supplying medicines to Thomas Jolly Death, one Daniel Hubbard, and divers other persons, without having obtained such certificate as by the said Act directed, contrary to the form of the statute in such case made and provided. Upon the evidence set forth in my notes hereunto annexed, I find that in one instance the defendant in his shop heard a patient state his complaint, examined him medically, and supplied the said patient with medicine of his (the said defendant's) own prescription, and in another instance supplied medicine to a patient for an eruption on his face. The question for the Court is whether these facts brought the defendant within the provisions of 55 Geo. III., cap. 194, and made him liable to the penalty therein provided and sought to be recovered in this action." Although, my lords, these findings are in the terms mentioned, your lordships will find that the learned Judge leaves it to the court to determine whether or not those facts which are mentioned in his note brought the defendant within the Act of Geo. III. The notes are rather long because they refer to some cases as to which the learned Judge found in favour of the defendant. But the only cases in which the determination of the Judge is in favour of the Apothecaries' Company are those in which the evidence has relation to two persons named Thomas Jolly Death and Daniel Hubbard. Those are the two cases to which he refers. The evidence as to Mr. Jolly Death's case your lordships will find on page 3.

THE LORD CHIEF BARON: Then you pass by George Shepperley's evidence?

SIR HENRY JAMES: I do.

THE LORD CHIEF BARON: That is not one of the two cases.

SIR HENRY JAMES: No, my lord. Shepperley is the defendant himself. I shall have to refer to his evidence; but the affirmative evidence, which I shall have to mention to your lordships, had better commence with the persons who are referred to by the learned County Court Judge. The evidence of Thomas Jolly Death commences on page 3, where he says, "On August 22 I went to defendant's shop. I saw him behind the general counter. I said, 'I want some medicine for sore throat, cold, tightness of chest.' Defendant came between the two counters and told me to face the light and open my throat. He looked down my throat. He said, 'A tightness there,' touching my chest. He said, 'I think I can give you something to relieve you: I don't think there is much amiss with you.' He gave me a bottle of medicine, to be taken internally, and I paid him 1*s.* I said, 'How much?' and he said, 'One shilling, please. I think you will find relief from that; if not, come again.' I did not specify the medicine I required." The rest of his evidence specifies what took place after the action was brought. Mr. Shepperley himself says as to Death's case, "I believe Death called and asked me to look at his throat. If he asked me, I should. I believe I gave him medicine. I do not think he brought a prescription. I do not recollect what I charged him. I have several times refused to prescribe." Then, my lords, as to Hubbard's case, the only evidence is that of Mr. Shepperley himself, and he says, "I believe I saw Daniel Hubbard in my shop. He asked for something for some pimples he had on his face. I saw that he had pimples. I did not examine him at all. We have a dispensing counter, which has a screen in front of it. I did not take him behind the screen. I do not think he went there. I think I gave him some medicine. This (bottle put in) is my writing on it."

THE LORD CHIEF BARON: Is that a bottle which came from this man?

SIR HENRY JAMES: I presume so; it looks like it.

MR. BARON CLEASBY: Did the County Court Judge decide this case at all?

SIR HENRY JAMES: Yes. Leaving it for your lordships' further judgment, he found that this case was a case coming within the 20th section of the Act of Geo. III.

THE LORD CHIEF BARON: He puts it as a mere question to the court, and as if it were a special case, merely asking for an answer to a question, but without having himself come to any decision. However, you say he did decide to convict?

SIR HENRY JAMES: Certainly, my lords, *pro forma* he decided

to convict, leaving it to your lordships to say whether, if you had been in his position, you would say the appellant had done that which would bring him within the provisions of the 20th section of 55 Geo. III.

My lords, I will refer you first to the Act, and then I will refer to the position of an apothecary, in order to see whether this is an act of prescribing as an apothecary. My lords, the Act under which these proceedings are taken is the Act which really first recognised the status of an apothecary in this country. It is the Act of 1815, the 55 Geo. III., cap. 194. My lords, that Act first recites the original charter of James I., under which the apothecaries were incorporated. Probably at that time, I mean the time of James I., the principal object of that incorporation was to give power to certain persons to search in shops or warehouses, where drugs were sold, so as to see that no spurious articles were sold. The status of apothecaries, at that time, was scarcely recognised other than as vendors or sellers of drugs. I think I can show your lordships how apothecaries became of much more importance than they formerly were, and how this Act, and the operation of that legislation, became a portion of that recognition which has placed them in their present position. The first section of that Act recites the charter of James I. Then it repeals that charter to a certain extent, and the first material section upon this matter is the 5th section. That section says:—"And whereas it is the duty of every person using or exercising the art and mystery of an apothecary to prepare with exactness and to dispense such medicines as may be directed for the sick by any physician lawfully licensed to practise physic by the President and Community of the Faculty of Physic in London, or by either of the two Universities of Oxford or Cambridge; therefore, for the further protection, security and benefit of His Majesty's subjects, and for the better regulation of the practice of physic throughout England and Wales, be it enacted, that if any person using or exercising the art and mystery of an apothecary, shall at any time knowingly, wilfully and contumaciously refuse to make, mix, compound, prepare, give, apply or administer, or any way to sell, set on sale, put forth, or put to sale to any person or persons whatever, any medicines, compound medicines, or medicinal compositions, or shall deliberately or negligently, falsely, unfaithfully, fraudulently, or unduly make, mix, compound, prepare, give, apply or administer, or any way sell, set on sale, put forth, or put to sale to any person or persons whatever, any medicines, compound medicines, or medicinal compositions as directed by any prescription, order, or receipt, signed with the initials, in his own hand-writing, of any physician so lawfully licensed to practise physic, such person or persons so offending shall, upon complaint made within 21 days by such physician, and upon conviction of such offence before any of His Majesty's justices of the peace, unless such offender can show some satisfactory reason, excuse, or justification in this behalf, forfeit, for the first offence, the sum of 5*l.*; for the second offence, the sum of 10*l.*; and for the third offence he shall forfeit his certificate, and be incapable of using or exercising the art and mystery of an apothecary, and be liable to the penalty inflicted by this Act upon all who practise as such without a certificate, in the same manner as if such party so convicted had never been furnished with a certificate enabling him to practise as an apothecary, and such offender so deprived of his certificate shall be rendered and deemed incapable in future of receiving and holding any fresh certificate unless the said party so applying for a renewal of his certificate shall faithfully promise and undertake, and give good and sufficient security, that he will not in future be guilty of the like offence." My lords, the only material part there is that this was dealing with that which was and could only at this time have been one portion of an apothecary's duty, namely, that of making up prescriptions—of compounding those prescriptions and of selling them when made up; that is to say, the making up the prescription, and the selling the medicine when so mixed up. The art or mystery could not be confined to that, because at this time chemists and druggists were, equally with apothecaries, making and selling drugs and making up prescriptions of physicians.

Now, my lords, the next section which is of importance is the 14th. This deals with the practices of apothecaries, and this is the first time apothecaries were subjected to examination. That section says, "And to prevent any person or persons from practising as an apothecary without being properly qualified to practise as such, be it further enacted that from and

after the first day of August, 1815, it shall not be lawful for any person or persons (except persons already in practice as such) to practise as an apothecary in any part of England or Wales, unless he or they shall have been examined by the said Court of Examiners, or the major part of them, and have received a certificate of his or their being duly qualified to practise as such from the said Court of Examiners or the major part of them as aforesaid, who are hereby authorised and required to examine all person and persons applying to them, for the purpose of ascertaining the skill and abilities of such person or persons in the science and practice of medicine, and his or their fitness and qualification to practise as an apothecary; and the said Court of Examiners or the major part of them are hereby empowered either to reject such person or persons, or to grant a certificate of such examination, and of his or their qualification to practise as an apothecary as aforesaid, provided always that no person shall be admitted to such examination until he shall have attained the full age of 21 years." Your lordships see that the examination there is dealing with that which would be a matter of science and of skill, not as formerly, probably that which had been one of the principal duties and the practice of apothecaries—namely, to sell medicines and drugs; but the examiners had to ascertain the skill and abilities of such person or persons in the science and practice of medicine. Of course, that is quite distinct, at this time, from the College of Surgeons and from surgical cases, where they had to deal with cases of internal diseases, such as fevers, measles, and other cases of that kind; and this skill and science in medicine was perfectly distinct, of course, from the practice of apothecaries selling drugs and medicines in the shop, which frequently before this time they had been in the habit of doing—carrying on their business in that way. Perhaps, my lords, I may mention that by section 15 it is provided that "no person shall be admitted to any such examination for a certificate to practise as an apothecary unless he shall have served an apprenticeship of not less than five years to an apothecary, and unless he shall produce testimonials to the satisfaction of the said Court of Examiners of a sufficient medical education and of a good moral conduct."

Then, my lords, section 20 is the section under which these proceedings have been taken. Of course, much turns upon the words of this section, whereby it is enacted "that if any person (except such as are then actually practising as such) shall, after the first day of August, 1815, act or practise as an apothecary in any part of England or Wales without having obtained such certificate as aforesaid, every person so offending shall, for every such offence, forfeit and pay the sum of 20*l.*; and if any person (except such as are then acting as such, and excepting persons who have actually served an apprenticeship as aforesaid) shall, after the said first day of August, 1815, act as an assistant to any apothecary to compound and dispense medicines"—which is put in opposition to the words "act or practise as an apothecary," which is different from the mere compounding or dispensing medicines—"without having obtained such certificate as aforesaid, every person so offending shall for every such offence forfeit and pay the sum of 5*l.*"

Then, my lords, there is a section to which many authorities in this case have reference. That is section 21, which prevents any apothecary from recovering any charges in any court of law unless such apothecary shall prove on the trial that he was in practice as an apothecary prior to or on August 1, 1815, or that he has obtained a certificate to practise as an apothecary under the provisions of this Act.

Then, my lords, as far as I know, there is only one other section which I think bears very much on this matter. That is section 28, upon which a distinct question in this case arises. By that section it is provided, "That nothing in this Act contained shall extend or be construed to extend to prejudice or in any way to affect the trade or business of a chemist and druggist in the buying, preparing, compounding, dispensing and vending drugs, medicines and medicinal compounds, wholesale and retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may so, exercise and carry on the same trade or business in such manner, and as fully and amply to all intents and purposes, as the same trade or business was used, exercised or carried on by chemists and druggists before the passing of this Act."

MR. BARON CLEASBY: Have you got these medical Acts in court collected in one volume?

SIR HENRY JAMES: No, my lord.

MR. BARON CLEASBY: They are all together, I think, somewhere. I have got the Act in question here, but not any other medical Act.

SIR HENRY JAMES: I can give them to your lordships.

MR. BARON CLEASBY: I mean, are they all collected in one volume?

SIR HENRY JAMES: I think there are very few Acts which affect this question. I will mention to your lordships what they are, but I was calling your lordships' attention to section 28, which reserves the right to chemists and druggists, not at the time of the passing of this Act living, but to any person, who, at any future time, should carry on the business of a chemist and druggist, the right to carry on that trade or business as fully and amply to all intents and purposes as the same trade or business was used, exercised or carried on by chemists and druggists before the passing of this Act. My lords, a distinct and separate point arises upon that section 28.

THE LORD CHIEF BARON: You may defer dealing with that point at present. You say there is a separate point arising on that. You do not propose to deal with that at present, but you are going back to some other point which you have departed from?

SIR HENRY JAMES: I will call your lordships' attention to the second point afterwards. Having mentioned it in order to call your lordships' attention to the sections of the Act which bear upon this question, I will deal with the points as they occur in order.

Now, my lords, I have to ask you to determine whether (upon the facts, to which we shall have to apply certain considerations) the appellant here has, under the 20th section of this Act of 55 Geo. III., acted or practised as an apothecary.

THE LORD CHIEF BARON: Yes.

SIR HENRY JAMES: My lords, what I have to submit to you is that, inasmuch as these words "acting or practising as an apothecary," must have a certain meaning attached to them, they must mean that the person is holding himself out and carrying on business as an apothecary; and it is not enough if a person, for charity's sake, or any other reason, does one isolated act—ones thing that an apothecary would do as a portion of his profession—to bring him within this clause so as to render him subject to the penalties stated in the section of this Act under which these proceedings are taken.

MR. BARON CLEASBY: This is the 20th section which you are dealing with now.

SIR HENRY JAMES: Yes, my lords. A chemist and druggist from the very nature of his business, if he never opens his mouth, if he exercises no discretion, if he takes no notice of anything a person who applies to him as a customer is suffering from, but if he merely sells him a medicine, is, in one sense, doing that which an apothecary does. An apothecary sells his medicines; he obtains a price for it, and can sue for it as for goods sold and delivered. Therefore, my lords, if it is to be said of a chemist and druggist, who is, no doubt, not only ostensibly but really a person the purport and object of whose business is to sell his drugs and wares, that if he does, for the sake of selling these wares, a certain thing which an apothecary does in the ordinary course of the carrying on of his business, he is liable to penalties under this Act, then I shall submit to your lordships that that contention cannot be supported, and that that is not enough to bring the chemist and druggist within the meaning of the Act. But the words must be looked at in a broader view, namely, the "acting or practising as an apothecary," meaning thereby that he shall be substantially carrying on his business in such a way as to come upon equal lines with an apothecary.

THE LORD CHIEF BARON: You are contending that one act is not sufficient.

SIR HENRY JAMES: I am contending, not only that one act may not in certain cases be evidence that he is carrying on the business of or acting as an apothecary, but I am also contending that one act is only a portion of what an apothecary does to carry on his business; and when I show that that is what a chemist would do to carry on his business I show that that is not enough.

THE LORD CHIEF BARON: The act which the defendant has done is a compound act; it is two acts.

SIR HENRY JAMES: When we come to the evidence, I will deal with that.

THE LORD CHIEF BARON: There is one act with this person of the name of Death, and there is another act with a person of the name of Hubbard. First of all, I wish you to point out

to us whether you wish to contend that there must be, first of all more than one act, and then possibly more than two acts, in order to bring a person within the operation of the Act of George III.

SIR HENRY JAMES: No.

THE LORD CHIEF BARON: You used the term "holding out," and that is rather important.

SIR HENRY JAMES: Nothing was further from my mind than to use the term "one act" in the sense of meaning "a sale to one person." I was speaking of it generally. I was speaking of "one act" in the sense of one portion of the profession of an apothecary. I am speaking of things and employing a generic term, and not particularly in relation to what is before your lordships. What I was endeavouring to explain to your lordships was that, whereas an apothecary, in the practice of his profession, has naturally to do (as I shall show your lordships) a great many things which require the exercise of skill and knowledge, as we have found in the Act of 55 George III., in exercising that science and skill whilst he practises his profession generally, he will have to attend to many classes of cases requiring skill and knowledge, and, in the course of carrying on that profession, will have to sell his drugs to the patients whom he attends; so I say it is not sufficient to bring a chemist and druggist within this Act to show that he equally with the apothecary does one of those acts of which the apothecary does many in order to carry on his profession. I hope I make myself understood as to the sense in which I use the words "one act." I am speaking of the chemist and druggist generally every day of his life, doing one of these things which I shall have to admit an apothecary equally does—namely, selling his drugs.

THE LORD CHIEF BARON: Is there any doubt that that is so?

SIR HENRY JAMES: I hope not.

THE LORD CHIEF BARON: There is no doubt in the world that every chemist and druggist in London compounds certain medicines, and an apothecary does the same.

SIR HENRY JAMES: And must dispense them.

THE LORD CHIEF BARON: And dispenses them. By that you mean, sells them.

SIR HENRY JAMES: He takes money for them, but probably the word "dispensing" would have rather a different meaning from the word "selling."

THE LORD CHIEF BARON: Then what is the meaning which you would give to that word "dispensing?"

SIR HENRY JAMES: I want your lordships rather to define that. Perhaps it is essential that you should. "Selling" would apply rather to a patent medicine, or a box of matches, or something of that kind. I should think that dispensing has rather a different meaning from that.

THE LORD CHIEF BARON: It may have. You may attach a different meaning to it, and I want therefore to ask you what you mean by it. You may call it dispensing if there is a physician's prescription to mix. In that case the chemist prepares it, and supplies it for money. It is both a selling, and it also comes under the grander name given to it of dispensing.

SIR HENRY JAMES: I should have thought that selling was near the mark.

THE LORD CHIEF BARON: Suppose it to be so, then I only want to know the way in which you use the word. In what sense do you use it?

SIR HENRY JAMES: I should think the right use of the word "selling" is in the sense in which everything is sold which requires no skill.

MR. BARON CLEASBY: Merely sold; whereas dispensing would be sold for a purpose.

SIR HENRY JAMES: I want to point out that dispensing may include the making up of the medicine. It may include the bringing together of several chemical substances in order to produce one result, and it must be subject to the skill of the chemist as to the quantities of these different substances, and as to the proportionate quantities into which they are to be placed together, as they may be poisonous if they are not properly compounded.

MR. BARON CLEASBY: You mean as to the mode of mixing them.

SIR HENRY JAMES: That is what I was endeavouring to convey to your lordships. It is the mode of mixing them up.

THE LORD CHIEF BARON: I know but two modes in which a chemist and druggist sells or dispenses his medicines, and it is very immaterial, as it strikes me, whether you call the one or

the other, or both, by the term selling or dispensing. If a man goes into a shop and asks for a bottle of Godfrey's Cordial, which was once well known as a patent medicine, and which is a well-known preparation, the chemist hands it to him over the counter and receives the money. Another mode in which he carries on his business, is where a physician's prescription is brought to him and laid before him. He then compounds a medicine which perhaps he has never seen or heard of in all his experience before, but he compounds it according to the prescription of the physician which is before him. Then he returns the prescription of the physician, and at the same time he delivers to the customer the medicine which he has compounded, and receives then the payment for it. I call both of those sales, but one is called a sale and the other dispensing.

SIR HENRY JAMES: Is there not another class of dispensing?

THE LORD CHIEF BARON: There may be.

SIR HENRY JAMES: The second view which your lordship has put is the case where a chemist, having a prescription written by a physician, makes that prescription up, but there he would only have to use that skill which Mr. Baron Cleasby has referred to, namely, the skill of mixing the drugs.

THE LORD CHIEF BARON: What is the third mode?

SIR HENRY JAMES: Supposing a person goes into a shop without any prescription, and says, "Give me a dose of Epsom Salts." The chemist sells it to him, but he must look to the age of the person who asks him for these Epsom salts, and be it a strong man or a weak child, he must give him a fair dose proportionate to his age and condition. He could not ask the man, "Do you want 2 ozs. of Epsom salts," or give him treble what he ought to take.

THE LORD CHIEF BARON: If a man comes into his shop and asks for a dose of Epsom salts—inasmuch as a dose for a full-grown strong man and a dose for a child of six years old would be a very different quantity—I am not saying that he must not ask for what description of person it is intended, or that he must not regulate the dose accordingly.

SIR HENRY JAMES: But he says give it to me *en masse*. Supposing you go into a chemist's shop and say, "Give me an effervescent draught;" he dispenses that. You do not carry that away in a bottle in your pocket, but you drink it on the spot.

THE LORD CHIEF BARON: I see no objection to that, and you may sub-divide the business of a chemist and druggist into twenty such operations.

SIR HENRY JAMES: That is dispensing. Directly you get to the case I put of medicines such as Epsom salts, there he acts, not on a prescription of a physician, which is directory, and which he has to obey, but in giving you that which you ask for, and in dispensing that he must bring in the exercise of some skill, because the customer does not know how it is to be mixed, or what quantity of water is to be used with it. That act of the chemist is the result of his skill and knowledge in his business.

THE LORD CHIEF BARON: You will be able to tell us on Friday, when we resume this argument, into how many subdivisions you will divide the business of a chemist and druggist.

The proceedings were then adjourned until Friday, November 23.

The arguments were resumed on November 23. Considerable interest was manifested in the proceedings, several well-known chemists being in court during the hearing of the case.

SIR HENRY JAMES, on resuming his argument, said: I will remind your lordships that the question involved in this case turns first upon the construction of the 20th section of the 55th Geo. III., cap. 194, and when your lordships have determined what is the proper construction to be put upon that section, you will have to consider whether the facts of the case as they appear on the notes of the learned County Court Judge, bring the appellant within that section. I will remind your lordships that that section says that if any person shall act or practise as an apothecary in any part of England or Wales without a certificate, he shall be liable to a penalty.

I ask your lordships, first, to consider what is the meaning of "acting or practising as an apothecary;" and, when that is determined, probably the duty of applying that determination to the facts of this case will not be so very difficult. My contention with relation to the words "acting or practising as an apothecary" is that a person to "act or practise as an apothecary" must not only do some particular act which is identical with one act that an apothecary does, but also that in substance the person complained of must hold himself out as in fact sub-

stantially doing the same acts that an apothecary in the course of his profession does.

Now, my lords, in order to determine whether there has been any "acting or practising as an apothecary" in the sense in which I submit the words should be used, it is necessary very shortly to consider what an apothecary is, and to trace how an apothecary has sprung into existence. It will be necessary to see both what an apothecary was at the time when this Act was passed, and also to see what an apothecary is now, when this Act, which is almost obsolete, as I think I shall show your lordships, is sought to be put in force.

My lords, an apothecary appears to have been originally a mere shopkeeper, and, at the time when the physician's existence and the art of surgery was first recognised by the charter of the 10th Henry VIII. probably an apothecary was unknown as a person who was required to possess any skill in relation to the art of medicine. That charter of the 10th Henry VIII. seems to have been the first recognition (at least the first of which I know) of the existence of any person practising medicine requiring skill in relation to its practice. That charter is set out in, and confirmed by, the statute 14 and 15 Henry VIII., cap. 5. No doubt that charter and that statute were intended only to apply to physicians and surgeons, but the words are general; they protect "all persons who shall exercise medicine;" still there is no doubt that at that time the persons intended to be protected were physicians—and it may be surgeons. I cannot find a charter under which the Royal College of Surgeons existed as distinct from the charter of the Royal College of Physicians. The persons who at that time were apothecaries were persons simply who carried on their business at a shop; and probably it will be found in connection with the business of a grocer. The apothecaries never brought to hear any skill in the art or practice of medicine, but they were mere dispensers and sellers of drugs. By degrees that position of an apothecary became altered, and in the reign of James I.—in the sixth year of his reign—there was a charter which is recited in the Act of 55 George III., cap. 194. This charter, my lords, is recited in the preamble to the Act, and your lordships will see that in reciting the charter of the 6th of James I. the apothecaries are spoken of in that charter in these terms, "And to all and singular other persons whomsoever brought up and skilful in the art, mystery, or faculty of apothecaries, and exercising the same right, mystery, or faculty, then being freemen of the mystery of grocers in the city of London, or being freemen of any other art, mystery, or faculty in the said city of London." My lords, what appears by that charter to have been intended is, that they should be subject to supervision, and that certain persons should have power to inquire into the nature of the drugs and wares sold by persons who, no doubt, at that time were so selling them in shops as a grocer would sell his wares. Now, my lords, that was the condition of things in the time of James I., but an apothecary from that time, and probably before that time, must have been growing into a person who required to use skill in his profession, and, no doubt at that time, even, was to some extent a person other than a grocer or a seller of wares and drugs; because in the 6 and 7 of William III., cap. 4, I find, "Whereas the art of the apothecary is of great and general use and benefit by reason of their constant and necessary assistance to His Majesty's subjects which should oblige them solely to attend the duty of their profession; yet by reason that they are compelled to serve several parish, ward and leet offices in the places where they live, and are frequently summoned on juries and inquests, which take up great part of their time, they cannot perform the trusts reposed in them as they ought, nor attend the sick with such diligence as is required. And whereas King James I., by his letters patent under the great Seal of England did incorporate the apothecaries exercising that art within London and seven miles compass by the name of the Master, Wardens and Society of the Art and Mystery of the Apothecaries of the City of London, Be it enacted" that apothecaries shall be exempt from performing certain duties, such as serving on juries, attending wardmotes, and so on. The exemptions are set out in sections 2 & 3 of the Act; and with these I need not trouble your lordships; but the point is that the apothecaries must at that time have had other duties than that of mere sellers of drugs and wares in shops. Still, their position was undefined as to whether they were entitled against physicians and surgeons to practise the art of medicine; and the point was raised in the case of "Rose v. The College of Physicians," which is reported in the 6th Modern Reports at page 44.

My lords, the action was then brought under the statute of the 14 and 15 of Henry VIII., for practising physic within seven miles of London without license.

THE LORD CHIEF BARON: Practising as a physician?

SIR HENRY JAMES: Practising physic, which would no doubt include both surgeon's and physician's practice. The words here are, "Practising physic within seven miles of London without license." It was an action which was brought under the statute 14 and 15 Henry VIII., cap. 5, for practising physic within seven miles of London without license. The case upon the special verdict was that the defendant, being an apothecary by trade, was sent to by John Scale, then sick of a certain distemper, and he having seen and being informed of the said distemper did, without prescription or advice of a doctor and without any fee for advice, compound and send to the said John Scale several parcels of physic as proper for his said distemper, only taking the price of his drugs. The question was whether this is a practising of physic such as is prohibited by the statute. And, after several arguments, the court at last unanimously agreed that practising of physic within this statute consists—"First, In judging of the disease and its nature from the constitution of the patient, and many other circumstances; Secondly, In judging of the fittest and properest remedy for the disease; Thirdly, In directing and ordering the application of the remedy to the disease; and that the proper business of an apothecary is to make and compound or prepare the prescriptions of the doctor pursuant to his directions. And it was agreed that the defendant, taking upon himself to send physic to a patient as proper for his distemper, without taking ought for his pains, has plainly taken upon himself to judge of the disease and fitness of remedy, as also the executive or directing part." And the plaintiff had judgment. But, my lords, that judgment was wrong, because in 5 Brown's Parliamentary Cases, page 553, the judgment in that case is overruled. My lords, I am sorry that no light is thrown upon the reasons for the judgment of the House of Lords. As is usual in these reports, the arguments of counsel are always given as if they were important, but the judgment of the Court is treated with apparent contempt, because it is simply said that after hearing the arguments the House of Lords reversed the decision.

THE LORD CHIEF BARON: But what was the decision?

SIR HENRY JAMES: They reversed the decision which I have read to you from the 6th Modern Reports.

THE LORD CHIEF BARON: You have read the special verdict, but I did not catch what was the decision.

SIR HENRY JAMES: The decision was for the plaintiff.

THE LORD CHIEF BARON: That he had practised as a physician.

SIR HENRY JAMES: That he had practised physic.

THE LORD CHIEF BARON: As "a physician," I thought you said.

SIR HENRY JAMES: The decision which is reported in the 6th Modern Reports was that upon an action being brought to recover penalties under the 14 and 15 Henry VIII. there was a practising of physic within seven miles of London, which rendered the defendant liable to the penalty. The words of the charter are *medicinæ exercent*.

THE LORD CHIEF BARON: The judgment was that the defendant had practised physic; that is as a physician?

SIR HENRY JAMES: He had been sent for to the house of a patient; he went to the patient's house, and he examined him; he returned to his own shop—for apothecaries all had shops in those days—and he sent him drugs, charging him for those drugs. Then your lordships will recollect the three resolutions which the court urged us to what constituted a practising of physic, and held that those facts constituted it a practice.

THE LORD CHIEF BARON: That you say was overruled.

SIR HENRY JAMES: Yes, then the whole report is summed up in "Brown" in this way, "It was ordered that the judgment given in the Queen's Bench, against the said Mr. Rose, should be reversed."

THE LORD CHIEF BARON: But does not the report in "Brown" give the arguments of counsel and what the points were; you say that the judgment gives no reasons.

SIR HENRY JAMES: It gives the arguments of counsel, but they do not seem to me to touch the point at all.

THE LORD CHIEF BARON: That may be; but you say that the judgment which overruled the Court of the King's Bench gives no reasons.

SIR HENRY JAMES: No, my lord, it gives none.

THE LORD CHIEF BARON: If it be necessary we will refer to the case and see whether we can collect what were the reasons for the judgment from the arguments and points made by counsel.

SIR HENRY JAMES: I thought the case in "Modern" would show something of the principle on which the court proceeded, and I have read those arguments (which are very long), but they do not seem much to the point. However, I will read them if your lordships like.

THE LORD CHIEF BARON: No, do not read anything which you do not think it essential to bring to the notice of the court for the purpose of your case.

SIR HENRY JAMES: My lords, the facts of that case were these: "The plaintiff, who was an apothecary and freeman of London, attended one Scale, a hutchin in the parish of Saint Martin-in-the-Fields, and made up and administered proper medicines to him, but without any license from the Faculty, and also without the direction of any physician, and without taking or demanding any fee for his advice. The defendants, apprehending this conduct to be an infringement of their privileges, brought their action against the plaintiff to recover the penalty of 5*l.* per month, under the above clause in their charter, and on the trial the jury found a special verdict, stating the charter, the confirmatory statute, and the facts of the case, and submitted to the court whether the defendant Rose did practise physic within the intent of the letters patent and Act of Parliament, and after this verdict had been three several times argued in the Court of Queen's Bench, the judges were unanimously of the opinion that the facts found did amount to the practising physic within the meaning of the Act of Parliament, and gave judgment accordingly. Hereupon a writ of error in Parliament was brought to reverse this judgment, and on behalf of the plaintiff in error it was argued that the consequences of it would not only ruin him but all other apothecaries, as in case of the affirmance of this judgment they could not exercise their profession without the license of a physician. That the constant usage and practice which had always been with the apothecary was conceived to be the best expounder of this charter, and that therefore the selling a few lozenges or a small electuary to any person asking a remedy for a cold, or in other ordinary or common cases where the medicines had a known and certain effect, could not be deemed unlawful, or practising as a physician, where no fee was taken or demanded for the same. That the physicians, by straining an Act made so long ago, endeavoured to monopolise all manner of physic solely to themselves, and if they should succeed in this attempt it would be attended with many mischievous consequences. For in the first place it would be laying a heavy tax on the nobility and gentry, who in the slightest cases, and even for their common servants, could not have any kind of medicine without consulting and giving a fee to a member of the college. It would also be a great oppression upon poor families, who, not being able to bear the charge of a fee, would be deprived of all kind of assistance in their necessities, and it would prove extremely prejudicial to all sick persons who, in case of sudden accidents or new symptoms happening in the night time, generally send for the apothecary, but who should not dare to apply the least remedy without running the hazard of being ruined. On the other side it was contended that by several orders of the college its members were enjoined to give their advice to the poor gratis, and that not only to such as could come to them for it, but every physician in his neighbourhood was obliged to visit the sick poor at their own lodgings, and therefore the objection that, if the apothecaries could not administer physic but by the prescription of a physician, the poorest sort of people would be lost for want of proper remedies had not the least foundation. And when these orders were observed not to have their full intended effect on account of the high prices which the apothecaries generally demanded for the remedies prescribed, whereby the poor were deterred from consulting the physician for fear of the charge of the physic, the college by a joint-stock erected several dispensaries in town, where, after the physicians had given their advice gratis, the patient might have the physic prescribed for a third, and generally less, of what the apothecaries used to exact for it, by which expedient many hundred persons of mean condition received their cures at a very small expense." Your lordships wished me to read these arguments, but they are all of this general nature, and do not touch the point of the case. However, they were argued before Parliament, and, apparently, are what we should call the popular argument. However, that argument does not touch the policy of the Act.

Now, my lords, Mr. Rose by that judgment certainly established this right—that apothecaries under the charter of James I. had the right to attend patients in the sense in which we use the term now, at their own houses, bringing skill to bear upon the diseases from which these patients were suffering. That seems to have been in addition to, and different from, what had been the primary office of an apothecary, namely, making up and dispensing and selling the prescription that a physician wrote. My lords, that portion of the apothecaries' duty is set out very fully in the 5th section of the Act of George III., which we are discussing: "And whereas it is the duty of every person using or exercising the art and mystery of an apothecary to prepare with exactness and to dispense such medicines as may be directed by any physician lawfully licensed to practise physic by the president and commonalty of the Faculty of Physic in London, or by either of the two Universities of Oxford or Cambridge, therefore, for the further protection, security, and benefit of His Majesty's subjects, and for the better regulation of the practice of physic throughout England and Wales, be it enacted that, if any person using or exercising the art and mystery of an apothecary shall at any time knowingly, wilfully, and contumaciously refuse to make, mix, compound, prepare, give, apply, or administer, or any way to sell, set on sale, put forth or put to sale, to any person or persons whatever, any medicines, compound medicines, or medicinale composition, or shall deliberately or negligently, falsely, unfaithfully, or unduly make, mix, compound, prepare, give, apply, or administer, or any way sell, set on sale, put forth and put to sale, to any person or persons whatever, any medicines, compound medicines, or medicinale compositions, as directed by any prescription, order, or receipt, signed with the initials, in his own handwriting, of any physician so lawfully licensed to practise physic, such person or persons so offending shall upon complaint made within twenty-one days by such physician, and upon conviction of such offence before any of His Majesty's Justices of the Peace, unless such offender can show some satisfactory reason, excuse, or justification in this behalf, forfeit, for the first offence, the sum of 5*l.*; for the second offence the sum of 10*l.*; and for the third offence he shall forfeit his certificate, and be rendered incapable in future of using or exercising the art and mystery of an apothecary, and be liable to the penalty inflicted by this Act upon all who practise as such without a certificate, in the same manner as if such party so convicted had never been furnished with a certificate enabling him to practise as an apothecary, and such offender so deprived of his certificate shall be rendered and deemed incapable in future of receiving and holding any fresh certificate, unless the said party so applying for a renewal of his certificate shall faithfully promise, undertake, and give good and sufficient security that he will not in future be guilty of the like offence."

My lords, you will see that even in 1815, so far as that section is concerned, the duty of an apothecary (and the only duty mentioned in that section), is that of compounding the medicine which a physician may prescribe; but it is clear that those duties which are set out were not commonly duties that an apothecary in the practice of his profession would fulfil.

Now there is a case in the 4th Barnewall and Adolphus, at page 625, of "The Apothecaries' Company v. Allen," which I cite at this moment for the dictum of Mr. Justice Parke, afterwards Lord Wensleydale. Mr. Justice Parke was then sitting in the Court of Queen's Bench, and he says this:—"The preamble to section 5 does not propose to recite all the duties of an apothecary, but only those referred to by the penal enactments which follow."

So that your lordships see that in 1815 it was calculated that an apothecary was a person who did make up and sell, without bringing to bear any skill upon the subject, prescriptions which a physician wrote; yet no doubt at that time the apothecaries had grown into existence as a profession where skill other than that of selling medicines was required. Of course, practically, as your lordships have to determine and apply this Act now, that portion of an apothecary's business which is mentioned in that section of the Act of 1815 is substantially gone. No apothecary now of course keeps a shop—it may be that sometimes they do under the Pharmacy Act, for it is possible that a person who is a chemist and druggist may also have a diploma from Apothecaries' Hall, but, *qua* apothecary, he has ceased to carry on the business of selling drugs, and I presume that if anybody were to go with the prescription of a physician to a gentleman who is practising as an apothecary now, and were to ask him to make up the prescription of any eminent physician, with-

out seeing the patient, but simply to act as a chemist and druggist, and charge his 2s. 6d. or 3s., he has no authority to do it.

THE LORD CHIEF BARON: Why?

SIR HENRY JAMES: I conceive he has no more authority to do it than a barrister would have to endorse a writ.

THE LORD CHIEF BARON: Why, if this statute be repealed? You are making an assertion of fact and of usage that if any gentleman were to go with a prescription of Sir William Gull's and present it to an apothecary, the apothecary would refuse to make it up. You state that as a fact. It may be so; but why?

SIR HENRY JAMES: I must put it to your lordships as an argument that the making up of a prescription of a physician now falls into the hands of chemists and druggists.

THE LORD CHIEF BARON: There is no doubt about that; but why do you say, whilst this statute is unrepealed, that if a gentleman has consulted Sir William Gull and obtained a prescription from him, and then instead of going to an ordinary chemist and druggist he prefers going to an apothecary to call upon him to make up the medicine which Sir William Gull has prescribed, why do you say he would not do it?

SIR HENRY JAMES: Because now the fact is that almost every apothecary has a diploma from the College of Surgeons. The general practitioner that exists now, it is a matter of common knowledge, does not exist separately and distinctly as an apothecary selling drugs, but he exists as a person bringing skill to bear in all diseases which he treats.

Mrs. BARON CLEASBY: What you say is perhaps true generally, but not universally, I should suggest.

SIR HENRY JAMES: I will not say that it is not sometimes done, but the practice is not so. The practice now is that an apothecary practising as a general practitioner—*qua* apothecary—has no shop. In the next place, he does not hold it out simply as his business to sell a drug mentioned in a paper which another person makes out; but an apothecary practises with a diploma from the College of Surgeons, also with a diploma from the Apothecaries' Hall. He is not a seller of drugs or a bare dispenser, but he is a person who brings skill to bear in the interest of and upon the diseases of his patients. Your lordships are aware that an apothecary may attend as an apothecary and not charge for the sale of any drugs at all; he is entitled to charge for his bare skill, and the knowledge of his art and mystery which he brings to bear upon the disease his patient is suffering from, and he need not charge for any drugs at all. That was determined in the case of "*Town v. Lady Gresley*," in the 3rd Carrington and Payne, 581. Chief Justice Best there says, it being an action for work and labour as an apothecary and for medicines furnished, that the plaintiff had charged both for medicines and attendance. Serjeant Wilde submitted that the charge for attendance must be taken off, as an apothecary had no right to make such a charge. Chief Justice Best says, "I am inclined to think that there is something in some of the Acts of Parliament upon the subject of attendances; but if there is not any express provision, yet the practice is so inveterate that I cannot allow the plaintiff to charge in both ways. An apothecary may charge for attendances if he pleases, and then the jury will say what is reasonable for those attendances, or he may charge for the medicine he sends, but he cannot be permitted to make a charge for both. I shall recommend the jury in the present case to strike off the charges for attendance, and make an allowance for medicine only."

THE LORD CHIEF BARON: In that case there was a claim for attendance, and also for the supplying of medicines. Was it supplying medicines or physicians' prescriptions?

SIR HENRY JAMES: He seems to have supplied them, his own self.

THE LORD CHIEF BARON: What Chief Justice Best said was that he might charge for attendance if he pleased, and recover, but he could not charge both for attendance and for the medicines pursuant to what may have been the necessities of the patient.

SIR HENRY JAMES: There is a note of the editor in which he puts the position of the apothecary somewhat strongly. That note is this—"This is the first case which has decided that an apothecary may charge for his attendances, provided he makes no charge for the medicine he furnishes. There has long existed in the profession a vague and undefined notion that an apothecary cannot charge for attendances. This may have arisen from the fact that an apothecary originally was

only a compounder of medicines prescribed by a physician. There does not appear to be any express provision in any of the acts of parliament upon the subject of attendances, and there is no doubt that the rule laid down by the learned Chief Justice is, in the present state of the medical profession, the most reasonable and the best that could be adopted both for the practitioner and the patient. There are many cases which require both skill and attendance, but which do not require the administering of much medicine, and it is well known in point of fact that, when attendances are not charged for, much more medicine is often sent than the case actually requires; and also that the charge for medicines generally bears no proportion to the cost price of the drugs. By giving the apothecary the option of charging for medicines or attendances according to the nature of the case, one of those inconveniences will be removed and the other considerably diminished."

THE LORD CHIEF BARON: Does it appear in that case whether the attendances for which the party claimed to be paid were attendances at the apothecary's own place. Were they attendances on his own premises, or did he go out to visit the patient at the patient's residence. Does that appear either one way or the other?

SIR HENRY JAMES: I should draw the inference that it was attending at the patient's house, because it says the plaintiff lived near Waterloo Bridge, and the defendant in some other street, which is named, and he charged for medicines and attendances. It does not, however, directly appear, but I should suppose it probably was at the house of the patient. My lords, there is also mention made of the duties of an apothecary in the case of "*Allison v. Haydon*," which is reported in the 4th Bingham, 619. That was an action of assumpsit for work and labour as a surgeon and apothecary, with counts for medicine sold and delivered. At the trial it appeared that the plaintiff had a certificate from the College of Surgeons, but none from the Master and Warden of the Apothecaries' Company. The defendant disputed certain charges for attending him in a typhus fever, and it was objected that he could not recover for those attendances, the 55 Geo. III., cap. 194, sec. 21 having enacted that no apothecary should be allowed to recover any charges claimed by him in a court of law unless he shall prove at the trial that he was in practice prior to or on August 1, 1815, or that he has obtained a certificate from the Court of Examiners by the said Act constituted. The learned judge was of this opinion, and the plaintiff was nonsuited. Serjeant Taddy obtained a rule *nisi* for a new trial on the ground that under this statute the privilege of the College of Surgeons enabled the plaintiff to charge for medical attendance, section 29 having enacted that the estate shall not lessen, prejudice, or defeat the rights, authorities, privileges, and immunities vested in and exercised and enjoyed by either of the two Universities of Oxford and Cambridge, the Royal College of Physicians, the Royal College of Surgeons, or the said Company of Apothecaries, except such as have been altered, varied, or amended by the Act, or of any person or persons practising as an apothecary previous to the said August 1, but the said Universities, colleges, and persons shall have such rights, save and except as aforesaid, in as beneficial a manner as they might have had if the Act had not been passed. Serjeant Lawes, who showed cause, relied on the express prohibitive language of the statute, no apothecary shall recover any charges unless he has proved that he has obtained a certificate. Then the plaintiff was non-suited for those charges upon the defendant for attendance upon him, and giving him advice in relation to this typhus fever. In that case Chief Justice Best said: "I think this is a useful law intended to put apothecaries upon a more respectable footing, and to exclude low and ignorant persons from the practice of medicine. But the words of the Act prevent all persons from recovering for attendances except such as have duly qualified themselves as apothecaries."

Then Chief Justice Best read the section: "No one therefore can recover unless he were practising as an apothecary before 1815, or has a certificate from the Court of Examiners of the Master and Warden of the Apothecaries' Company. If, indeed, the plaintiff had been practising as a surgeon, and had administered medicine as ancillary to a surgical case, his claim could not have been resisted, but he was lowering a typhus fever, which is the province of the physician or apothecary."

Then, my lords, although this does not bear upon the express point, the Chief Justice also says: "A surgeon formerly was a mere operator who joined his practice to that of a barber. In later times all that has been changed, and the profession has

risen into great and deserved eminence. But the business of a surgeon is properly speaking with external ailments and injuries of the limbs. With a view to the recovery of a patient in a case of that description, he may perhaps prescribe and dispense medicine. But the Act has drawn the distinction between the various departments of the art with great precision. A chemist may prepare and vend, but not prescribe or administer medicine. Each is protected in his own branch, and neither must interfere with the province of the other. We think the plaintiff has interfered with the province of the apothecary, and that, therefore, this rule must be discharged." Now, my lords, I have quoted these cases to show you that the right of an apothecary is quite distinct from that of vending drugs, and, of course, if your lordships are going to hold that because apothecaries formerly sold drugs in their shops, chemists, by selling drugs in their shops, are acting and practising as apothecaries, of course no physician's prescriptions could ever be made up by a chemist and druggist again, because that is now one of the principal parts of their business.

THE LORD CHIEF BARON: What is the meaning of what you are now contending for, because if this were a mere case of a person going in and asking for a particular medicine, and that medicine being sold over the counter by the appellant in this case, that would be acting merely as a chemist and druggist; but here the patient goes and consults him, and upon that consultation he, recommending him a certain medicine, or thinking that a certain medicine would be proper for and useful to him, supplies him with that medicine.

MR. BARON CLEASBY: I understand what you say, Sir Henry, to be this—that undoubtedly it was at one time part of the business of an apothecary to make up the prescriptions of physicians. Now, you say, that if you are to construe the Act of Parliament in the way which is contended, any chemist who makes up the prescription of a physician in this way is liable to the penalty imposed by the Act.

SIR HENRY JAMES: I say so. I am most anxious to follow the view expressed by the Lord Chief Baron; but if your lordships will allow me first to follow out the view which I have taken of the case, I think the argument will be shortened when we come to deal with that part of the case in which we apply the principles of construction to this case. It is rather difficult, before we determine what this statute means, to spring at once into the facts of this case. My lords, I am still upon what is "acting and practising as an apothecary," and in order to show what is the meaning of this statute, it is necessary to know what an apothecary was, and in what way he acted in his business. I shall show you that there was in former times but one act that was done by an apothecary, namely, that he sold wares, and that afterwards by degrees he had attached to his existence as an apothecary the performance of other duties, and that he practised and acted in a different manner, namely, that he brought skill to bear upon attending patients for diseases in other cases than those which were called surgical cases, namely, cases such as those of organic disease, cases where the ordinary functions did not act from disease, and in all cases except injuries, it was the province of an apothecary to attend upon the patient and to give him advice; and I will show you that although he sold no drug, although there was no medicine administered, and, therefore, that no drug could have been sold, he had a right to charge for his attendance, namely, for the advice he gave to a patient, without selling anything at all. When we come to consider this Act, I think your lordships will find, as I have pointed out, that you cannot construe the Act literally, because, if you say that a chemist selling a drug is "acting and practising as an apothecary," you at once reduce the Act to an absurdity. It is true that in selling a drug he acts as an apothecary would act, and perhaps did act, to some extent in 1815, because an apothecary might have sold drugs then, and he might have practised as an apothecary in that sense. Still, your lordships are not going to convict a man for that; therefore, so far as anything is done in relation to the selling of a drug, I contend that that does not come within the 20th section of the 55th George III., cap. 194, and that it must be something other than and different from the performance of the duty of an apothecary, *quid* the selling of a drug.

Now, my lords, there are some cases that throw light upon this question, and those are cases in which it was necessary to construe the 21st section of this Act. Your lordships will recollect that, by the 21st section, it was enacted that no apothecary should be allowed to recover any charges claimed by him in any court of law, unless such apothecary should prove

on the trial that he was in practice as an apothecary prior to or on August 1, 1815, or that he had obtained a certificate to practise as an apothecary from the Apothecaries Society.

Your lordships see that, after the passing of this Act, there were many questions which arose when an apothecary brought his action upon his bill; because all the apothecaries who had been practising before 1815 did not apply again for a certificate, and did not subject themselves to examination; and, in order to prove their right to recover, they had to prove (being without a certificate) that, under section 21, they were entitled to practise, because they had practised as apothecaries before August 1, 1815. Then, my lords, in these cases the judges had to determine whether they had, or had not, practised.

THE LORD CHIEF BARON: Of course this man, the appellant, did not practise before 1815.

SIR HENRY JAMES: Oh, no, my lord. I am afraid I have not made myself understood. Your lordships see that in section 20, we are discussing the words "acting or practising as an apothecary." If your lordships will look at section 21, the words are not quite the same, but they say that a person could practise after 1815 if he was in practice as an apothecary before. Therefore, I thought it was of some value to see what was the meaning of the words in section 21, "In practice as an apothecary," as bearing upon the proper construction to be put upon the words "acting or practising as an apothecary," in section 20. In that view I thought it was advisable to look at the cases where a construction had been put upon the words "in practice," in section 21. It has nothing to do with this gentleman, who, I hope, was not in practice before 1815—he would be a very old man if he was—(laughter). The question that had to be determined in those cases under section 21 arose always in actions either for penalties or for—

MR. BARON CLEASBY: I cannot help regarding this as a most important question. I myself feel great difficulty in understanding it sufficiently to deal with it as the case stands at present, because I think the 28th section of the 55th Geo. III. is a most important one. It is transparent that there are four branches in the medical profession—namely, physicians, surgeons, apothecaries, and chemists. You will find it is laid down so. Well, in considering what they claim to be entitled to after the Act of 1815, I cannot help referring to the 28th section of this Act, which recognises the chemists as a branch of the profession, and reserves to them all the rights which they were in the habit of exercising rightly or wrongly before 1815. What materials have we before us to ascertain anything as to the present defendant being entitled to that.

SIR HENRY JAMES: Your lordships see that this is a case not only of great importance to chemists and druggists, but to every poor person who enters a chemist's and druggist's shop. That 28th section is entirely different from the point we are now discussing. I shall have to take your lordships' view upon that; and, though the learned County Court Judge has found no fact upon that, there is the evidence of the two witnesses Parsons and Glazier.

MR. BARON CLEASBY: If you show, by going back to the practice for years past, that chemists have been in the habit of dispensing across the counter, you must give all the evidence which you can as to what now is, and has been for a considerable time past, the business of a chemist.

THE LORD CHIEF BARON: Of course you know that if upon this case it should appear that the defendant has done no more than every chemist and druggist in the kingdom has a right to do and he has not acted as an apothecary, then the judgment is wrong.

MR. BARON CLEASBY: He has acted as an apothecary, and the question is, Has he the right to do it? He acted as an apothecary because he prepared and mixed up a prescription.

SIR HENRY JAMES: My lords, I have gone over some ground which may make it appear, at first sight, to be antagonistic to the statute; but in order to show what an apothecary was, I show what is now the common business of a chemist and druggist. I think I can show that under the Pharmacy Act; and I will show that, until lately, an apothecary did nothing but sell drugs. It is important, therefore, to see whether that which every chemist has done, and is always doing, does not come in one sense within the construction of the words "acting or practising as an apothecary;" and I will endeavour to show with reference to that Act of selling the drugs (which of course is acting and practising as an apothecary) that that construction cannot be put upon the words. Do I understand Mr. Baron

Cleasby to say that he thinks there should be some more complete finding on the part of the County Court Judge?

THE LORD CHIEF BARON: Be it in what words you like, if an apothecary has power to do what a chemist and druggist has also power to do—that is, to make up prescription, and vend medicines across the counter; then, so far as that may be done by an apothecary who happens to have an apothecary's certificate, it may be done by a chemist and druggist who has no such certificate, and who is not, therefore, an apothecary. The question here is, whether upon what the defendant has done he is liable to a penalty. Here he has done something more than merely selling drugs or medicines across the counter, because he has been consulted, in fact, by a man who tells him he has a pain in his chest and sore throat, and he (the chemist) has thereupon supplied him with a medicine for the purpose. Now, upon that the question here is, whether that is also within the privilege of a chemist and druggist, although it is within the privilege of an apothecary; and to hold that this man is liable to this penalty, would be to hold that every chemist and druggist is.

MR. BARON CLEASBY: After a very long argument in this case, it might turn out that this might not arise. It seems to me to be a case of so much importance that what I should recommend would be that a new trial should be directed, and a *certiorari* applied for to have the question determined by the Superior Court.

SIR HENRY JAMES: I cannot, my lords, submit to the view which the Lord Chief Baron has taken of this case, for we shall place before your lordships the greatest possible, and the gravest difficulty, to determine where the duty of a chemist and druggist ceases, and where the duty of a medical man begins. Every chemist and druggist in this country, my lords, is interested in this matter, and is to some extent, taking a practical part in this litigation; therefore, if the Apothecaries' Hall wish to press this to a solemn decision, I accept the suggestion of Mr. Baron Cleasby most readily, and I ask that that should be done. I most cheerfully accept the suggestion that on the question arising on this 28th section, there being no judicial decision upon it, the case should be remitted back to the County Court Judge; and we will undertake to ask, if that is done, for the removal of the case to the Superior Court, so that we may take it to the highest appeal court in the kingdom.

THE LORD CHIEF BARON: I have no objection to the course which has been suggested by my learned brother Cleasby. What does the other side think of that?

MR. DAY: I may perhaps be allowed to make a suggestion to your lordships. I am told that there is another case, involving precisely the same point, which is now in progress in your lordships' court. I do not know whether or not it is set down for trial as yet, but that is an action brought by the Apothecaries' Company against a person named Wiggins. I am told that there are two such cases pending, and that these cases are now in train for solemn decision by your lordships. Therefore I would respectfully suggest that if your lordships have any doubt as to what the finding of the County Court Judge is, that this case should be sent down to him for him to give his finding upon it, and that the matter should not be argued until after the decision of those cases in your lordships' court. I would suggest that it should be sent down to the learned County Court Judge to be restated, because I am assured that the Judge did find the fact whether there has been an acting as an apothecary.

THE LORD CHIEF BARON: I do not see why it should not be sent down again to be restated. Perhaps no consent would be necessary for that purpose. It would be enough for us to at once direct that this case should stand over altogether until after the decision of some one or more of those cases to which you refer.

SIR HENRY JAMES: My friend has mentioned the case of the "Apothecaries' Company v. Wiggins," of which I know nothing, but one of my learned friends, whose assistance I have in this case, tells me that he does know something of it, and he is counsel in the case. He informs me that Mr. Wiggins has not acted quite in the same way as this gentleman has.

THE LORD CHIEF BARON: That does not signify. If there be a case which will raise anything like the question or questions which we have to determine, we should like to have that case tried before a judge and jury in one of the superior courts before we proceed to adjudge finally upon this case.

SIR HENRY JAMES: I have no objection to this case standing over, but may I point out that, supposing in the case which is now in your lordships' court it should be proved that the

defendant has been in the habit of attending patients at their houses, and has been giving advice perfectly distinct from the selling of drugs, I am not going to be bound by that.

THE LORD CHIEF BARON: You will neither of you be bound by anything that shall hereafter take place. It is only that we may be a little enlightened by the case, or one of the cases, which are to take place in this court before pronouncing a decision on the case which is now before us. Do not imagine I am throwing out anything like an opinion, but I think it extremely probable that, if we were to consume the day in bearing this case argued, we should think it right, without perhaps giving any reasons for our judgment at all, to direct a new trial. I think that is extremely probable.

SIR HENRY JAMES: I willingly fall in with Mr. Baron Cleasby's suggestion, and, if your lordships will grant a new trial, we will undertake to move for leave to transfer it to a superior court. At the same time, I may say my client wants a decision in his own case, and not in Mr. Wiggins'.

THE LORD CHIEF BARON: Then if we direct a new trial, probably you will agree at once that the case shall be transferred from the County Court to this court.

MR. DAY: I submit that there is no ground upon which your lordships can grant a new trial. The facts of the case were before the judge, and he has given his decision. If your lordships think the facts are not sufficiently set out in the case, the only proper course to take will be to send the case down to be restated by the County Court judge.

MR. BARON CLEASBY: We have power by the Act of Parliament to direct a new trial if it appears that a material issue or a material question is not disposed of one way or another. I think that to direct a new trial will be the proper way of disposing of this case.

THE LORD CHIEF BARON: Direct a new trial without more ado, and then, if it be brought before this court, either party will give whatever evidence he thinks fit. Then we shall be in full possession of all the facts which can be proved to enable us to judge whether the defendant has incurred a liability to a penalty or not.

MR. DAY: I submit that there is no issue which has been left undetermined by the County Court judge, but that the trial was complete. Your lordships have nothing but the case before you, and I am content that the case should go back to the County Court judge for him to restate the case; but I do protest against a new trial being ordered where there is no evidence of any issue being left untried by the learned judge of the County Court.

THE LORD CHIEF BARON: Considering you appear as counsel for a great company, who can only be interested in seeing that the law is conformed to and obeyed, if we think, in such a case as this, where a penalty being claimed in an action, it ought to be more fully considered, and that either party should have full liberty to give all the evidence which the case admits of, I do not think you ought to object.

SIR HENRY JAMES: I would rather join in the appeal your lordship has made to the counsel for the Apothecaries' Hall. My client can do to-morrow the same thing that he has done before, and a fresh action can be brought, but the costs of this action should be treated as part of the costs of the fresh action.

MR. DAY: There is no question of costs in this case. I have purposely abstained from saying a word about costs; that is not the issue here.

THE LORD CHIEF BARON: If, instead of sending it down to be restated by the County Court judge, you can have a decision of this court at once, it would be better that that should be done. Therefore we will direct at once that the case shall be retried, and that for that purpose it shall be transferred at once into this court. Let that be so.

SIR HENRY JAMES: If your lordship pleases.

CONDY V. MITCHELL.

(Special Report.)

This case was tried on November 27, in the Appeal Division of the Supreme Court of Judicature, before Lord Justice James, Lord Justice Baggallay, and Lord Justice Thesiger. It was a suit instituted by the plaintiff, Mr. Henry Bollmann Condy, inventor of the well-known "Condy's Fluid" and "Condy's Ozonised Water," against the defendant, Dr. Mitchell, who was formerly in partnership with him, the object of the suit being

to obtain an injunction restraining the defendant from carrying on the business of making and selling those preparations under the style of "The Condyl's Fluid Company," so as to induce the public to believe that the article sold by the defendant as "Condyl's Fluid" was really manufactured by Mr. Condyl.

Mr. Hemming, Q.C., and Mr. Bradford appeared for the plaintiff; Mr. Kay, Q.C., and Mr. Woodroffe, for the defendant.

From the facts of the case, as stated by Mr. Hemming, it appeared that Mr. Condyl was a gentleman who had earned a great reputation as a practical and scientific chemist, and that he, in 1856, patented the fluid known as "Condyl's Fluid," which was composed of permanganate of soda, and certain antiseptics. He also invented (but did not patent) the preparation known as "Condyl's Ozonised Water," which, being an article for the toilet, was prepared from permanganate of lime, permanganate of soda not being free from disagreeable effects upon the skin. On March 25, 1870, in consideration of a payment of 1,500*l.* by Dr. Mitchell for a share in Mr. Condyl's business, the plaintiff and defendant entered into partnership for the manufacture and sale (among other things) of Mr. Condyl's preparations. That partnership was carried on under the style of "Bollmann Condyl & Co." until 1873, when it was dissolved. A suit of "Mitchell v. Condyl" was then instituted, praying that the partnership accounts might be taken, and asking for a declaration that the plaintiff in that suit (Dr. Mitchell) had a right not only to call the fluid he made "Condyl's Fluid," but also to use the name of "Henry Bollmann Condyl." Vice-Chancellor Bacon, before whom the case was tried, however, said "No; you may use the term 'Condyl,' as a description of the article, but you must not use the name 'Henry Bollmann Condyl.'" His lordship the Vice-Chancellor thereupon said he would give Dr. Mitchell a declaration that he was entitled to use the name "Condyl" as a description of the article, in addition to the ordinary partnership decree. Dr. Mitchell's counsel, however, not thinking that declaration worth having, only took the ordinary decree in partnership cases.

In that suit, which was instituted on August 9, 1873, a receiver was appointed, who continued to carry on the business until he was discharged in 1876. In carrying on that business the receiver of course continued to use the old bottles, wrappers, and labels. Immediately after the appointment of the receiver Mr. Condyl commenced, in his own name of "H. Bollmann Condyl," the same description of business as had been carried on by the firm of "Bollmann Condyl & Co.," using for the purpose of carrying on that business labels, bottles, and wrappers similar to those which had been employed by the old firm. Dr. Mitchell shortly afterwards commenced business in partnership with his sons under the style of the "Condyl's Fluid Company," also using labels, bottles, and wrappers similar to those previously used. Mr. Condyl complained of the use of those labels, &c., considering them calculated to deceive the public by leading them to believe that they were his preparations, whereas they were prepared by Dr. Mitchell, and were composed of permanganates of potash instead of being composed of permanganate of soda and permanganate of lime, permanganate of potash being a cheaper and more easily procured substance. He complained particularly of the use by Dr. Mitchell on his wrappers and labels of copies of exhibition medals awarded to him (Condyl) personally.

LORD JUSTICE JAMES: They were not awarded as medals of honour to him, but as medals of honour to the article manufactured.

MR. HEMMING: They were awarded to Mr. Condyl, before the partnership, as a distinguished chemist, who had made very valuable preparations. They were not confined to Condyl's Fluid.

LORD JUSTICE JAMES: I suppose the real object of this suit is to advertise to the world that your client is the inventor.

MR. HEMMING: I think not. I know that very often is the object of suits, but I have in this case the strongest possible evidence that Mr. Condyl is extremely well known as a good chemist and a good inventor, and that nobody who was actuated by a desire to get a really good article for the purpose of disingering would buy from anybody but Mr. Condyl. He therefore has the right to say, "I want to tell people that I am the man who invented this, and I have a right to the benefit of any reputation that belongs to me." Whether he exaggerates the value of that reputation does not matter; be that large or small, he has a right to go into the market, and say, "Buy my goods instead of those of somebody else, because I am the distinguished chemist who invented these things, and who is

known as a distinguished and able chemist." He has also a right to prevent anybody else selling these goods under the same name, or in such a way as to lead the public to believe that the goods sold are made under the superintendence of this scientific and gifted chemist. The style which Dr. Mitchell has adopted of "The Condyl's Fluid Company," has a tendency to suggest to the public that Mr. Condyl has something to do with his company.

LORD JUSTICE BAGGALLAY: Does "Condyl's Fluid Company" mean anything more than a company for the sale of Condyl's Fluid?

MR. HEMMING: It suggests a great deal.

LORD JUSTICE JAMES: He does not take the name of "Condyl," but he takes the name of "Condyl's Fluid."

MR. HEMMING submitted that that was the point which arose in the case of "Cheavin v. Walker," as to the Patent Filters, in the case of the Singer Sewing Machine Company v. Wilson as to the sewing machines, and in the case ss to Minton's Tiles, which was decided by the House of Lords. [The learned counsel referred to these cases at great length.] Of course, after the decisions in those cases, he could not dispute that when a name was well known as designating a particular manufacture, other people making the same thing might call it by the same name; but he submitted that they had no right to make a different thing and to call it by the same name. The only possible object with which the defendant, Dr. Mitchell, could have adopted the style of "The Condyl's Fluid Company" instead of his own name, was that the public might be in some way deceived, and that he might benefit by the use of Mr. Condyl's name. He need not refer to the authorities which showed that a man could not even use his own name if he did it for the purpose of deceiving; that having been clearly settled in the case of *Burgess v. Burgess*, as to the anchovy sauce, and also in the case as to Day and Martin's Blacking. Clearly, therefore, Dr. Mitchell could not be entitled to use the name of Mr. Condyl in the way he had. In the Singer sewing machine case the defendant had boldly put his own name on the machines he made; and that was the ground upon which the decision in that case was given; here Dr. Mitchell had done nothing of the kind.

LORD JUSTICE JAMES: What was decided in that case was a simple proposition of law, that a man cannot be charged with fraud unless he commits actual fraud or enables the person with whom he is dealing to commit fraud upon the ultimate purchaser. When a clear principle is established, the question is whether the defendant himself has made any false representation or done anything which enables the person with whom he is dealing to make a false representation to the purchaser. The question here, therefore, is whether putting "Condyl's Fluid Company" on the labels is a false representation, or whether it enables anyone to represent what is false.

MR. HEMMING submitted that it was not necessary to prove actual deceit, but only that it was calculated to deceive; and this the evidence abundantly proved. [The learned counsel read the evidence in the case at some length.]

MR. BRADFORD also addressed the court, and referred their lordships to the reasons given by Vice-Chancellor Bacon for his judgment in this case, his lordship having granted the decree mentioned by Mr. Hemming in the suit of *Mitchell v. Condyl*, which was not the subject of appeal, and having dismissed the bill in *Condyl v. Mitchell* with costs. That order of the Vice-Chancellor he trusted their lordships would reverse.

Their lordships, without calling upon the respondent's counsel, gave judgment in the case as under:—

LORD JUSTICE JAMES said it required some courage on the part of the plaintiff to bring such a suit at all, and after the Vice-Chancellor's judgment it was strange that there should be this appeal. The case had nothing whatever to do with any one of the cases the reference to which had occupied so many hours of the public time. Here there were two partners, and whatever might have been the origin of "Condyl's Fluid" or "Condyl's Ozonised Water," the right to use those names as connected with the manufacture of those articles was the joint property of Condyl and Mitchell. The latter had obtained his right by payment of a substantial money consideration, and the name "Condyl's Fluid" was as much Mitchell's property as Condyl's. The partners had subsequently quarrelled and the partnership had been dissolved. But the circumstances had not given Condyl a right to the sole use of the name "Condyl's Fluid." Then each of the partners had set up separate continuations of the business. The true of the partnership, in fact, had divided

into two branches. Each partner had then a right to use all the reputation acquired during the partnership, to represent himself as the successor of the partnership, and to make a legitimate use of the trade name. One said, "I put up my own name." The other said, "Having a right to use the name 'Condy's Fluid,' I called myself 'The Condy's Fluid Company.' No right could accrue to the plaintiff unless he could show that after the dissolution of the partnership one-half of it was selling things made by the other half. There was no evidence of any new reputation having been acquired by the plaintiff since the partnership. The Vice-Chancellor had pointed out clearly in his judgment that there was nothing in the defendant's acts to make the world think that what was done by one partner was really done by the other. The appeal must be dismissed, with costs.

LORD JUSTICE BAOGALLAY was of the same opinion. At the end of the partnership the partners had an equal right to the name in question. The style of the partnership had been "Bollmann Condy and Co.," and the plaintiff had set up under his own name as "H. Bollmann Condy." It was not necessary to consider whether he could have been restrained from doing so; but he came with a very bad grace against the defendant. It was an everyday occurrence for a firm to take its style from the article which they made and sold, and it was natural for a firm manufacturing "Condy's Fluid" to take the name of "The Condy's Fluid Company." It was impossible to contend that the plaintiff had any trade mark, and his case as originally made in his bill had not been made to rest on that. It was to be regretted that the plaintiff had resorted to the method he had used to obtain evidence, and to what was, in fact, a contrivance to catch the vendors of the article.

LORD JUSTICE THESIGER was of the same opinion. It had not been seriously contended that any right to a trade mark had been infringed. The facts would negative any such contention. It was admitted that the name "Condy's Fluid" did not import that the article was manufactured by Condy, but that by whomsoever made the article offered for sale was made of a certain composition. It was, therefore, incumbent upon the plaintiff to establish that a fraud had been practised upon him. He must show that the defendant, by the use of a trade name, or by means of advertisements, had misled the public into the belief that he was selling as his own an article actually manufactured by Condy, and also that he did so with the intention of deceiving. That this was necessary was shown by the case of "The Singer Manufacturing Company v. Wilson" (2 "Ch. D.," 434). Here there was no evidence of such fraud. On the dissolution of the partnership, each of the partners had done a reasonable thing—Mr. H. Bollmann Condy took his own name, and Dr. Mitchell, who had constituted the "Company," called himself "The Condy's Fluid Company." It might as well be contended that Condy should have been prevented from using his own name as that Mitchell should be prevented from using the name he had taken. He agreed as to the unsatisfactoriness of the evidence. A good deal of it seemed to him not admissible at all. There was no satisfactory evidence to establish a fact which it was necessary for the plaintiff to establish—viz., that any reasonable person would have thought that the defendant was representing to the public that the things he was selling were manufactured by Condy.

THE SALE OF SODA WATER.

In our last number we briefly mentioned a case decided at the Selby Petty Sessions on November 12, in which Messrs. Cutting & Sons were prosecuted under the Sale of Food and Drugs Act for selling some soda water not of the quality required by the Act. The case was defended by Mr. Henry Glaisyer, LL.B., instructed by the Chemists and Druggists' Trade Association. We received a fuller report on the date of our publication, and as the matter is of considerable importance we now give an extended report.

Police Superintendent Gill, who prosecuted, stated that on September 11 he purchased of Mr. T. J. Cutting three bottles of soda water, for which he paid ninepence. He told Mr. Cutting they were required for analysis. They were sealed, and one was sent to Mr. Alfred H. Allen, the public analyst for the West Riding of Yorkshire, who he retained in his own possession, and the third he left with Mr. Cutting. The analyst certified as follows:—"The sample of soda water was quite free from lead and other poisonous metals. The sample contained an amount of bicarbonate of soda, not exceeding about seven

grains to the pint. Regarded as an effervescent drink, the sample was perfectly free from objection, as a remedy it was deficient in soda; the amount of bicarbonate of soda in the soda water of the Pharmacopœia being thirty grains to the pint."

Mr. Glaisyer having called Mr. Gill's attention to that portion of the certificate which stated that as a beverage it was perfectly free from objection, inquired if he was aware there were two kinds of soda water.

Mr. Gill replied in the affirmative, but said he asked simply for soda water.

Mr. Gill then called Mr. Alfred Henry Allen, the public analyst.

Mr. Allen having explained the result of his analysis of the soda water as given in his certificate, was cross-examined by Mr. Glaisyer as to the different qualities of soda water, their constituent properties and their uses. Mr. Allen said as a beverage Mr. Cutting's soda water was free from objection. He, however, drew a distinction between soda water as a beverage and soda water as a remedy. If he went to a druggist's shop and asked for a bottle of soda water he should expect to get the British Pharmacopœia preparation; that was soda water made according to the standard prescribed by the British Pharmacopœia, which required that there should be thirty grains of soda to the pint, or fifteen grains the bottle. If he asked for soda water at an hotel or place of refreshment he should expect to get an article prepared as a beverage with less soda in it. He had at different times examined one or two dozen samples of these one contained no soda, some had a small quantity, while others had the full amount. In answer to further questions Mr. Allen said that to his taste the large proportion of soda in the Pharmacopœia made it rather nasty as a beverage. In answer to a magistrate, Mr. Allen said that the sample simply did not contain the quantity of bicarbonate of soda officially ordered, and if a medical man sent a patient for soda water it was important the article supplied should possess the proper quantity of soda.

Mr. Glaisyer: The summons does not treat this soda water as a "remedy," but as an "article of food," and I contend that as such it is unobjectionable and contains a sufficient quantity of bicarbonate of soda. If Mr. Gill had asked for the Pharmacopœia preparation *Liquor Sodæ Effervescens*, he would have been supplied with it; but he asked for soda water, and he got soda water as usually prepared. There were two distinct kinds of soda water manufactured—one for medicinal purposes and the other to be consumed as a beverage. What was sold to Mr. Gill was soda water proper, and was an entirely distinct article from the soda water of the Pharmacopœia.

Mr. Glaisyer then called Mr. Thomas John Cutting, who said that he had sold soda water for 28 years, during which time he had had no complaints, and his trade had increased. Dr. Todd was one of his customers, and he had expressed great satisfaction with it. He kept the Pharmacopœia or medicinal soda water, but did not sell it unless it was specially asked for. He should not like to drink it regularly, as it left a disagreeable soapy taste in the mouth.

Mr. John Attfield, Ph.D., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, examined by Mr. Glaisyer, said that from his experience of soda water there were three articles sold under that name. There was aerated water, which contained no soda at all; there was a second kind which was a mixture of aerated water and bicarbonate of soda in varying quantity from two to eight grains to the pint; and there was a third kind known as the medicinal article or *Liquor Sodæ Effervescens*, also known as the British Pharmacopœia soda water. This was introduced into the Pharmacopœia that physicians might have a medicinal article. The official quality had a disagreeable soapy and alkaline taste from the quantity of soda which was introduced into it. No. 2 is more or less soapy, and it was within his knowledge that the public objected even to this. What the public required was a mixture of aerated water, with two or three grains of bicarbonate of soda to the bottle. When there was an excess of acid in the stomach No. 3 is the very thing that is wanted, but it could only be taken as a medicine. Of the three bottles of soda water which Mr. Cutting sent him, under the seal of the police, one contained seven grains, and the other two eleven each of bicarbonate of soda. There was much difficulty in mixing the bicarbonate of soda, that it frequently happened the quantity would vary in a few bottles. He never found thirty grains in any but medicinal soda water. He quite agreed with what Mr. Allen had said. The medicinal water would be very deleterious if taken con-

stantly, weakening the action of the gastric juice. The chairman, after deliberating some time with Mr. Smith, said they had fully considered the case. They thought there had been less soda than there ought to have been, but having regard to the professional evidence they had decided to dismiss the case.

ALLEGED ADULTERATION OF PEPPER.

THE same defendants were then charged with having sold two ounces of cayenne pepper, adulterated with common salt and coloured with red ochre or some similar ferruginous material. The pepper was bought by Mr. Gill, on September 11, and Mr. Cutting was told for what purpose it was required. It was divided into three proportions, one being sent to Mr. Allen in a registered letter, one kept by Mr. Gill, and the other was left with Mr. Cutting. The following is a copy of Mr. Allen's certificate:—"The sample contained about $1\frac{1}{2}$ per cent. of common salt. Common salt is often added to cayenne pepper to increase the brightness of the colour, and to prevent it from fading in the light. The sample was also coloured with a small proportion of red ochre or some ferruginous material. The above additions are not injurious to health. No other adulterations or admixtures were detected." Mr. Allen, having repeated the result of his analysis, was cross-examined by Mr. Glaisyer as to the tests he had applied.

Mr. Allen said he had applied the microscope and had also burned the pepper and discovered from the ash that it was not pure. Asked if the crystals which he observed might not have been a natural chloride of potassium found in the pepper, said he believed them to be crystals of chloride of sodium, but that certainly they were distinct from and outside the original structure of the pepper. The proportion of oxide of iron he had found was about 1 per cent., or only about one in a thousand. He did not think this could be due to rust from the mill in grinding, as that would have been brown, and what he observed was red. Asked if he would have recommended a prosecution in this case. Mr. Allen frankly replied he should not, and on this answer the magistrates said they could not do other than dismiss the case. They refused, however, to allow costs to the defendants.

Mr. Francis Taylor, chemist, of Selby, was also summoned for selling as soda water water aerated with carbonic acid gas, containing no soda.

Mr. James Grayson, solicitor, of York, appeared for the defendant and urged that aerated water was well-known to the public and constantly sold as soda water.

The Bench fined the defendant 2s. 6d. and costs.

QUININE PILLS.

ON Nov. 20, at Wednesbury, before J. Spooner, Esq., stipendiary magistrate, Henry V. Jessop, chemist, Market Place, Willenhall, was summoned under the Sale of Food and Drugs Act, for having, on September 10, sold "a certain compounded drug, to wit, quinine pills, which were not composed of ingredients in accordance with the demand of the purchaser."

A youth named Henry Constable, who is engaged by the inspector under the Act named, said that on the day mentioned in the summons he went to defendant's shop, and presented a piece of paper and purchased some pills. He had not got the original paper, as that was kept by the person who served, but he took a copy of the writing upon it, which was as follows:—"Pil. quinia, B.P., 12 pills." On getting outside the shop he gave the box containing the pills to Samuel Toy, who was waiting outside. On being told that he might question the witness, defendant said the pills were not served by him, but by his assistant, who made them, and who had been with him for five years. The pills were compounded exactly according to the British Pharmacopœia.

Samuel Toy, assistant to Mr. Horder, said he received the pills from the last witness. He took them back into the shop, told the assistant they had been bought for analysis, and gave him a third part of them, sealing up the remainder in two separate boxes, and afterwards giving the latter to the inspector.

Mr. J. G. Horder, inspector under the Act, deposed to receiving these samples and passing one of them over to Mr. E. W. T. Jones, analyst.

The latter gentleman was sworn, and read the following certificate, which he drew up after analysing the sample which he received:—"The sample, if intended as 4-grain pills, contains 1.21 grains of sulphate of quinine too little, viz., 1.79 instead

of 3 grains, but the pills average 4.65 grains, and therefore the percentage of sulphate of quinine in the mass is only 38.55, instead of 75 as ordered in the Pharmacopœia." He said the fact for the prosecution was that the pills were not made strictly according to the form of the British Pharmacopœia.

Mr. Spooner: There is some quinine in them.

Mr. Jones: There is about one grain short per pill.

Mr. Spooner: Here is a paper which asks for a box of quinine pills. It does not say how much quinine there shall be in them.

Mr. Jones: But the "B.P." means that they shall be compounded in accordance with the British Pharmacopœia.

Mr. Spooner said if there was any quinine in the pills he was not bound to state the quantity. The case did not come within his jurisdiction. If there was any quinine in the pills it was quite sufficient for him.

Mr. Horder: The summons is issued under the 7th section of the Act, which says, "No person shall sell any compound or drug which is not in accordance with the demand of the purchaser." In this case the purchaser asked for quinine pills "B.P.," or in accordance with the British Pharmacopœia.

On the suggestion of Mr. Spooner, Constable was re-called, and in reply to a question from the Bench whether he asked for "B.P.," he said he simply gave the paper.

Mr. Spooner said he should not convict, "B.P." might mean anything. He would grant a case if the inspector liked, but he would not deal with it, as he did not think what had been proved was sufficient to warrant a conviction. At the same time he would advise the defendant not to sell quinine pills that were not compounded in accordance with the formula of the British Pharmacopœia.

The Defendant: I should just like to say that it does not matter, according to the Pharmacopœia, if there is only a quarter of a grain of quinine in a pill.

Mr. Spooner: Some people may want a grain, and some people may want more.

Mr. Horder said the fact was that people would have to take two of defendant's pills to get as much quinine as there ought to be in one.

Mr. Spooner: They have to take ten pills instead of five. (Laughter.)

Mr. Jones stated that he wrote out the note, which was in the ordinary form of a medical prescription.

The summons was accordingly dismissed.

AGRICULTURAL SEED ADULTERATION.

EIGHT years ago an Act of Parliament, called the Adulteration of Seeds Act, was passed with a view to putting a stop to the dishonest practices then rife. It appeared that certain men made it their business to collect worthless seeds which resembled those used in agriculture, and to kill these seeds by heating them in a kiln. The dead seeds were then sold for mixing with more valuable articles. The fraud was very difficult to detect, because, of course, the seeds when sown did not produce anything, and the failure to grow could always be explained by natural causes. For a time the severe penalties imposed by the Act proved deterrent. But recently it has been discovered that these frauds are being practised to a larger extent than ever. Some of the leading seed merchants, on discovering this, organised an inspection to find out how far the practices had spread, and to prosecute the offenders. The inspection is finished, but the report is not yet published. A prosecution, however, which we report below, has been carried to a successful issue, fines and costs to the gross amount of 15l. 5s. having been inflicted. We believe this case is but the first of a series.

On November 26, at the Mansion House, Mr. Thomas Strange-ways, a seed merchant in Mile End, was summoned before the Lord Mayor for an infringement of the Adulteration of Seeds Act, 1869, in having, with intent to defraud, sold killed seeds, or seeds in which the vitality or germinating power had been destroyed by artificial means. He pleaded "Not Guilty." Mr. Besley, barrister, conducted the prosecution; Mr. Walter Beard, solicitor, appeared for the defence. Mr. Besley, in opening the case, said the inquiry was the first which had been instituted under the Act in question. The practice of adulterating seeds was not only fraudulent, but highly detrimental to agriculture, and the statute was passed to repress it by more effectual laws than those previously in force. By it killing or dyeing seeds

was prohibited, as was also the sale of such seeds, and for the first offence the penalty imposed was not to exceed 5*l.*, and for the second or any subsequent offence, 50*l.* or under. The proceedings under the Act must be taken within 21 days. The object of killing seed was that it might not grow and betray its worthless character, for were it to grow the farmer would at once know that he had been defrauded, and that what he had paid 60*s.* a bushel for, believing it to be turnip or some such seed, was actually composed of 50 per cent. of weeds or spurious seed. On the other hand, if undiscovered, it would be sown, and its failure would be attributed to natural or unavoidable causes. Alexander Francis deposed that on October 12 he saw a man named Chapman in Mark Lane, and was shown a sample of seven sacks of killed charlock seed. The price was 6*s.* 6*d.* a bushel. Witness arranged to purchase the lot and to receive it on the following Thursday. On October 29 he met the defendant at the seed market in Mark Lane. The defendant pulled him by the coat and he followed him into the street. He said, referring to what Chapman had arranged, he had brought up the seven sacks that day. After some conversation he produced an invoice in which the seed was described as "old charlock." Witness seeing that, said they must have an understanding together that the seed was not to grow, because if it did, according to that invoice, he had nothing to fall back upon. The defendant clapped him on the shoulder, and said "between man and man" net a seed of it would grow, and that if it did he would put it in the kiln again for nothing, adding, "You know the state of the law. We cannot put anything into writing, but you must trust me and keep your own counsel." The defendant then gave him a sample bag of the seed, and another bag of a second sort, saying he had killed the latter seed for some persons in the country who had refused to take it because the bulk was not equal to the sample. He also said there had been expenses to the amount of 5*l.* incurred, but he did not wish to fall out with them, as they were good customers. Witness looked at the samples, and said it was larger in the grain than the previous sample. The defendant said it would do well if sifted, the larger mixing with swedes, and the smaller with turnips. The trade mark for killed seeds was three "O's" with a stroke through them. Upon seeing the defendant again, witness complained to him that the seed had not been delivered at Trig Wharf, according to arrangement. The defendant said he was very suspicious about witness, and he did not intend to part with the seed unless he got the money; that a van with the seed had been waiting, but as he did not come it was taken away. Witness then paid him 9*l.* 10*s.* in gold. The defendant asked him if he could do anything with the other seed, and witness promised to consider the matter. The defendant had previously said, "You can depend upon the seed being thoroughly well done; not like Frith's. They shoot down the seed in the kilns, but don't scrape the sacks. I am very careful with this seed, and I always scrape the seams of the sacks myself with a small needle, so that there cannot possibly be a single seed to grow." Witness subsequently purchased other seed. Three pounds of turnip seed was usually sown to the acre. Twenty-eight bushels (the quantity of seed he purchased from the prisoner) would sow 460 acres, and 24 bushels about 430 acres. If dead seed was mixed in the proportion of half and half, that quantity would sow about 1,700 acres. Replying to Mr. Beard, he said he took up the matter at the request of Mr. Sharp, of Sleaford, in whose service he was previously. He believed he was buying killed charlock seed. He could tell such seed with certainty. He did not mean to kill the seed again. Mr. Charles Sharp, of Sleaford, deposed that he, with Mr. Burnett, promoted "The Adulteration of Seeds Act," and he employed the last witness to make the purchases in question. Charlock was a prolific seed, bearing a yellow flower. It was worth 3*s.* 6*d.* a bushel, and was crushed for oil and manure. When killed it had no proper agricultural purpose, nor was it an article of commerce. Swede turnip seed varied in price from 7*s.* to 8*s.* a bushel. Killed seed had no value whatever. It was only sold for mixing with seed of a higher value. If the seed was not killed it would betray the fraud. He had sown some of the seed in question, and it had not germinated. It appeared to be dried up. He had never heard that it was used for bird seed. At this stage the defendant, under his solicitor's advice, withdrew his plea of "Not Guilty," and urged that what he had done was not with any intention to defraud. The Lord Mayor fined the defendant 5*l.* for the offence of killing the seed, and 5*l.* for that of selling the killed seed, and 5*l.* 5*s.* costs. The money was paid.

Who's Bond?

IN the High Court of Justice, Common Pleas Division, the trial between James Hickisson and William Christian on the one side, and Bridget Sarah Murphy on the other, as to the right of making "Bond's" Marking Ink, came to an end on November 26.

One of the plaintiffs (James Hickisson) had married a daughter of the late John Bond, and the other had married the widow of a nephew of the late John Bond. She had previously sold her chemist's business to the defendant's husband, but she claimed that she had reserved her rights to the marking ink.

Mr. Justice Lopes, who tried the case without a jury, found that the defendant had made "Bond's" Ink without having the right to do so, and though the plaintiffs did not ask for damages he awarded 15*l.* to Hickisson and 10*l.* to Christian, and also granted a perpetual injunction against the defendants, with costs. The injunction ordered that a writ of injunction issue to restrain the said defendant, and her workmen, servants, or agents, from using the word "Bond" in or upon any labels or pedestals, or labels affixed to pedestals manufactured for or by her, and from in any other way representing the marking ink manufactured by or for her to be "Bond's" Marking Ink, and from selling the same or causing the same to be sold as "Bond's" Marking Ink, or from doing any act or thing to induce the belief that marking ink manufactured by her or for her is "Bond's" Marking Ink or marking ink manufactured by the plaintiffs. The said action was brought for wrongfully and deceitfully using and imitating the plaintiffs' trade marks, and for an injunction. We, therefore, do strictly enjoin and command you the said Bridget Sarah Murphy, and your agents, and servants, and every one of you, henceforth altogether absolutely desist from using the word "Bond" in or upon any labels, or pedestals, or labels affixed to pedestals manufactured for or by you the said Bridget Sarah Murphy, or from in any other way representing the marking ink manufactured by or for you the said Bridget Sarah Murphy to be "Bond's" Marking Ink, and from selling the same or causing the same to be sold as "Bond's" Marking Ink, or from doing any act or thing to induce the belief that marking ink manufactured by or for you the said Bridget Sarah Murphy is "Bond's" Marking Ink or marking ink manufactured by the plaintiffs, until our said Divisional Court shall make order to the contrary.

Witness, Hugh McCalmont, Baron Cairns, Lord High Chancellor of Great Britain, at Westminster, the twenty-eighth day of November, one thousand eight hundred and seventy-seven.

DISPOSING OF A CHEMIST'S BUSINESS.

THE case of Gilbert & Burdoo v. Wigginton came before the Brompton County Court on December 5. The plaintiffs were Messrs. Bickaell (Messrs. Hine, Gilbert & Burdoo), chemists and druggists and agents for the transfer of medical and chemical businesses, 30 Old Jewry Street, Aldgate, and the defendant was Mr. Wigginton, lately carrying on business in Old Ford Row, Bow. The action was brought to try the right of plaintiffs to recover the sum of 12*l.*, alleged to be due as commission on the transfer of defendant's business. It appeared that in June last the following advertisement appeared in several journals:—"Business for Disposal.—In a thickly-populated healthy neighbourhood, East London.—A genuine Ready-money Retail and Prescribing Business. Returns about 400*l.* Capable of increase. Opening for Dentistry. Corner shop, nicely fitted and well stocked. Convenient house, good side entrance. Hold upon long lease, at low rental. Satisfactory reasons for disposal. Address, 'Statim,' Barron & Harveys, Giltspur Street, London." Mr. Gilbert shortly after called upon defendant, and offered to act as agent, stating that he had customers for such business on his books. Defendant then said he wanted 350*l.* for his business. Mr. Gilbert said, "Ah! but it has been advertised for 320*l.*" Defendant then said, "Yes, but there is your commission." Subsequently it was agreed that plaintiffs were to have 5 per cent. on the first 160*l.*, and 2½ per cent. on the second, the business being disposed of through their agency for 320*l.* to a Mr. Fairs, who now held it. Defendant contended that the plaintiffs were to get their commission from Mr. Fairs. Verdict for the plaintiffs.

ANOTHER PROSECUTION BY THE APOTHECARIES' SOCIETY.

ON November 13, John Faull, chemist and druggist, White Abbey Road, Bradford, was prosecuted at the County Court by the Apothecaries' Society for acting as an apothecary without legal right to do so.

The witnesses called by the prosecution were as follows:—

Leah Hayhurst, a married woman, deposed that on May 29 Mr. Faull had prescribed and given her medicine for her child, who was suffering from bronchitis. The child died, but no attempt was made to prove *malpraxis*, the offence being in supplying the medicine.

Elizabeth Page stated that on July 28 Faull had prescribed for her daughter, who was suffering from diarrhoea.

Samuel Hihbert deposed that Faull had given him medicine for a sick headache on May 25.

Charlotte Sykes said that Mr. Faull had given her medicine for her baby; complaint not stated.

In defence it was urged that the defendant had not exceeded his rights or the customs of the trade.

The case was adjourned until the appeal in the case of *Sheperley v. The Apothecaries' Society* should be decided.

SCOTCH CHEMISTS FINED FOR SELLING SPIRIT OF WINE WITHOUT A LICENSE.

ON the 11th inst., at a Justice of Peace Court held at Dunblane, William Corson, chemist, Callander, for selling spirits of wine without a license, was fined 12*l.* 10*s.*, but the Justices strongly recommended that the fine should be remitted entirely.—Gilbert Farie, chemist, Callander, was charged with a similar offence, as also with selling methylated spirits without a license. He was fined 12*l.* 10*s.*, for each offence, with a recommendation that the fine applicable to the second offence should be remitted.—Walter Thomson, chemist, Donne, was also charged with selling spirits of wine without a license. He pleaded not guilty. At the conclusion of Mr. McKenzie's address for the prosecution, Mr. Campbell, of Inverandoeh (who, with Mr. Stirling, of Kippendavie, occupied the bench) remarked to the effect that Mr. McKenzie had made out his case, whereupon Mr. Gavin, who appeared for the defence, declined to address the court, on the ground that the case had been prejudged. It was explained by the court that no judgment had been given by them, that they were ready to hear any argument which could be adduced by Mr. Gavin, but that gentleman still declined. The respondent was fined 12*l.* 10*s.*, with recommendation that the penalty be remitted as far as possible.

BANKRUPTCIES AND LIQUIDATIONS.

W. B. ANLINGTON, Chemist, Weymouth Street, Portland Place. THIS case came before the Court on the 11th inst. The debtor has petitioned for the liquidation of his affairs, and Mr. Brough said that he was instructed to apply for the appointment of a receiver and manager of the estate, and for an interim injunction staying further proceedings at the suit of certain creditors. The total debts were about 2,000*l.*, of which about 1,200*l.* were unsecured, and the assets consisted of stock, furniture and effects, and the goodwill of business, the value not yet being ascertained. Mr. Wntts, a creditor for 300*l.*, was proposed as receiver and manager, the nomination being supported by creditors for 878*l.* Mr. Registrar Pepys made the appointment, and granted an interim injunction.

BENNETT BROTHERS, Chemical Manufacturers, Hawkesbury, Wilts.

THE debtors, William Weston Bennett and Alfred Bennett, carrying on business in co-partnership as above, under the style of the Hawkesbury Alum Company, and described also as of 22 Leadenhall Street, general merchants, have petitioned for the liquidation of their affairs; and Mr. E. C. Willis applied to the Court last month for the appointment of Mr. H. T. Wilde, accountant, Moorgate Street, as receiver of the estate, and for an interim injunction restraining proceedings of creditors. The liabilities were about 2,500*l.*; and Mr. W. W. Bennett, in an affidavit made by him in support of the application, stated the approximate value of the assets at about 3,000*l.* This estimate was exclusive of their share in the works at Hawkesbury, but

included a claim against the Thames Chemical Company (Limited) for 560*l.* or thereabouts, to recover which they had recently brought an action, which had been referred to the arbitration of Mr. William Wilson, of Jubilee Street, Mile End Road, chemist. A portion of the assets consisted of furniture and effects, and a share of 35-84ths of the concern carried on at Hawkesbury. The furniture, goods, and effects were valued at 100*l.*, and the share in the Hawkesbury Company at 1,000*l.*, although the latter might prove to be of greater or less value, according to the result of the experiments shortly to be carried out, and which it was anticipated would turn out very successful. Various judgments and executions had been levied against the debtors' share in the Hawkesbury property, and it was necessary that the proceedings should be restrained. Mr. Registrar Murray appointed Mr. Wilde to the office of receiver, and granted an interim injunction. The following are in the list of creditors:—

	£	s.	d.
M. F. Van Swyndregt, Sugarloaf Court, E.C.	286	17	9
W. T. Bennet, 22 Leadenhall Street	275	18	2
W. Caudery & Co., 151 Fenchurch Street	250	0	0
W. T. Scott, Marshgate Lane, Stratford	200	0	0
D. Roberts, 57 Bishopsgate Street Within	150	0	0
Pickford & Winkfield, 148A Fenchurch Street	150	0	0
B. Jacob & Son, 485 New Cross Road	130	1	0
E. M. Cauthb, 11 Pancras Lane, E.C.	100	0	0
T. Bennett, 22 Leadenhall Street	87	10	0
A. Hughes, 2 Moorgate Street Buildings	82	0	0
J. Scrutton, 9 Gracechurch Street	75	0	0
Sir Charles Price & Co., Upper Thames Street	68	19	8
William Hunt & Sons, Wednesbury	67	4	6
Stamford & Seaward, 41 Bishopsgate Street Within	51	13	0
— Crowe, chemist, The Hollies, Lower Clapton	50	0	0
The Oriental Banking Corporation	41	7	10
The Thames Chemical Company (Limited)	35	0	0
Dr. Paul, 106 Fenchurch Street	35	0	0
J. Glanville, 15 Great St. Helen's	25	0	0
— Keen, 28 Stanley Street, Pimlico	17	0	0
W. Moore Jack's Coffee House, Mark Lane	13	0	0
Davis, Spackman, & Co., 4 Little Tower Street	10	16	8

Separate Creditors of Mr. Alfred Bennett.

T. Bennett, 22 Leadenhall Street	200	0	0
— Hughes, Bromley, Kent	20	0	0
Miss Sturt, Bromley	26	0	0

The separate creditors of Mr. W. W. Bennett are for small amounts.

ON November 21, Mr. Willis, on behalf of the debtors and receiver, applied for the continuation of the interim injunction pending the liquidation. Mr. Lee opposed on behalf of Mr. D. Roberts, of 57 Bishopsgate Street Within, who had recovered three judgments and issued execution against the property at Hawkesbury. Another claim being set up the sheriff was ordered to sell the debtor's interest in the property and pay the proceeds into court; and Mr. Lee submitted that Mr. Roberts would be prejudiced if he were not allowed to proceed in the interpleader issue. After hearing Mr. Willis in reply, his Honour said that the object of the injunction was to protect the property and he must continue it. Injunction enlarged accordingly.

T. W. FENWICK, Chemist and Druggist, Stamford.

THIS case was recently brought before Mr. Registrar Brougham. The adjudication was made in March, 1875, and the Controller reported the trustee to the Court for neglect of duty in not furnishing a certified copy of his estate-book due on April 18, 1877, as prescribed by the Act and Rules. On the case being called Mr. Aldridge, the official solicitor, said that since the proceedings were taken the trustee had complied with the requirements of the Controller, and paid the costs. His Honour made a note accordingly.

J. H. D. JENKINSON, Chemist, Sheffield.

A SINGULAR case disclosing some interesting points in reference to trusteeship in liquidation came before the Judge of the Sheffield County Court on November 15. The facts of the case appear in the following report:—

Mr. Clegg appeared on behalf of the debtor to apply that an order should be made on Mr. F. E. Leggo to bring in his accounts as receiver and manager of the estate, and also as trustee in the matter of the proceedings; also to file his bill of costs as such receiver and manager and trustee, for the purpose of the same being taxed by the taxing officer of the Court, and that Mr. Leggo be ordered to pay the costs of this application.

On May 8, 1876, Mr. Jenkinson had filed a petition in that

Court for the liquidation of his affairs, and on the same day Mr. Leggoe was appointed the receiver and manager of the estate. Of course on his appointment Mr. Leggoe made the usual affidavit that he would perform the duties devolving upon him by virtue of the office according to the provisions of the Bankruptcy Act of 1869, and should pass his accounts as such manager and receiver at the time the registrar should direct. The first meeting of creditors was held on June 2, 1876, and Mr. Leggoe was continued as trustee to act under the committee of inspection. That committee of inspection consisted of Mr. Francis Richardson, of the Sheffield and Rotherham Bank; Mr. Earle, accountant; and Mr. John Unwin Wing. They were to fix the amount of remuneration to be paid to the trustee. He might say that committee had never fixed the amount of remuneration, but he believed Mr. Leggoe relied upon some memorandum that he got the debtor to sign when he came to a standstill, and would not get along in the proceedings. He then proceeded to read an affidavit which had been filed by Mr. Jenkinson.

His Honour: Has this estate been realised?

Mr. Clegg answered that it had paid a dividend. He believed everything had been closed, and the trustee released, but the solicitor's bill had not been paid. At the first meeting of creditors it was resolved that if the estate were sold as a whole it might be on such terms as to cash and credit as the committee might deem desirable. In the affidavit of Mr. Jenkinson the opening paragraphs were simply formal, and referred to the date of the filing of the petition and the appointment of Mr. Leggoe as receiver and manager, the holding of the first meeting, and his appointment as trustee. Some of the creditors at the first meeting stated that they would be willing for the debtor to have the estate at such a sum as would pay a composition of 5s. in the pound, together with the payment of all costs incident to the proceedings. Debtor entered into negotiations with Mr. Leggoe for the purchase of the estate on the terms proposed. Mr. Leggoe informed the debtor that his charges as receiver would be about 100*l.*, and as trustee about 50*l.*; the solicitor's charges were 50*l.* 6*s.* 7*d.*, and upon that representation the debtor agreed to pay 200*l.* in discharge of such charges, and signed an affidavit to that effect. Debtor had no advice before signing the memorandum.

His Honour: What value do you attach to a memorandum signed by a debtor?

Mr. Clegg said he attached none, but Mr. Leggoe seemed to think that the debtor having agreed to certain terms, it was not necessary to consult either the court or committee of inspection or anybody else; in fact, he could do as he liked. The charges were in excess of the amounts allowed before the Bankruptcy Act, and the debtor objected to a number of the charges in the bill. The account was in some respects a remarkable one. He dared say his Honour had occasionally gone to London and might possibly have gone to Birmingham, but the receiver put down:—"Expenses to Birmingham five guineas"—that was money actually paid for his going to Birmingham on July 6, and then on the same day they had ten guineas put down for his going to London. He found in the same account, "receiver's cheques, preparing of statements, &c., including stamps, printing, extra notices, notices in local papers, and expenses of closing estate, 100*l.*" He did not see what a receiver had to do with the expenses of closing an estate. A little lower down there were trustee's charges, 50*l.*. Then followed one of the most extraordinary charges he had ever seen in a receiver's account. It was "John Unwin Wing's charges, fifteen guineas"—Mr. Wing being one of the committee of inspection. What right Mr. Leggoe had to pay all these sums of money he did not know, but at any rate some of those charges were what they complained of. They had no particulars whatever as to how the 100*l.* was arrived at, neither had they any particulars as to the 50*l.*, the charge made as trustee. Mr. Leggoe had filed an affidavit in answer to this, and in the 6th paragraph he said that between June 28, 1876, and July 3, a period of five days, he had several interviews with Jenkinson as to the carrying out of the resolutions passed at the meeting. Mr. Leggoe added that there was no necessity for his remuneration to be fixed by the committee of inspection. He submitted that Mr. Leggoe should have submitted his account to the committee of inspection for them to decide what was the proper amount of remuneration to be paid to him. On July 3 the debtor called at his (Mr. Leggoe's) office, and signed the following memorandum:—"Sheffield, July 3, 1876. To Mr. F. E. Leggoe, trustee. On condition that you allow Mr. Ryland to have a bill of sale on Fargate, and my

father a bill of sale on Duke Street and Stafford Road, I agree to allow you to continue and collect all book debts and receive the proceeds of stock and fixtures now in George Street towards the costs, 100*l.* receiver's charges, 50*l.* trustee's charges, 50*l.* 6*s.* 7*d.* solicitor's charges, and to pay all other costs and charges out of pocket, and then to pay balance to me." Debtor had not then got his discharge, and he submitted that that letter or memorandum was of no value whatever. It appeared to him a matter of very grave consideration that a trustee should ask a debtor to sign a memorandum of that kind. The trustee was entitled to his fair and reasonable charges as allowed by law, and as a rule those allowances were very liberal indeed. It appeared to him that Mr. Leggoe must have known and felt at the time he got this memorandum signed that his charges of 100*l.* as a receiver and 50*l.* as a trustee were certainly such amounts as the registrar would not have allowed. He submitted, further, that Mr. Leggoe had no power whatever to make any arrangement of the kind with Mr. Jenkinson as to this sum to be paid.

His Honour remarked that the question was, Could the debtor release the trustee from his obligations to the Court for his acts?

Mr. Clegg submitted that the receiver was an officer of the Court, and as such was bound to bring his accounts there whatever the debtor might say. But the trustee in his affidavit stated that the debtor was still indebted to him in the sum of 55*l.* 3*s.* 2*d.*

His Honour: How was it the creditors gave the trustee his release without settling these matters?

Mr. Barker (instructed by Mr. C. G. Esam, for the trustee): They passed a resolution agreeing to accept a composition of 5s. in the pound, and they got it. The creditors are not interested in this application at all.

His Honour: And subject to that they gave back the estate to the debtor?

Mr. Barker replied that was so, and added that Mr. Leggoe had commenced an action against the debtor for the recovery of this amount. There had been some negotiations on the subject, but the action was still pending for the recovery of 55*l.* 3*s.* 2*d.*

Mr. Clegg said Mr. Leggoe had since received some of the proceeds of the estate, and, further, he had acted as trustee since he was released as trustee. He had actually sued persons in that Court and recovered verdicts against them—that was since his release as trustee.

Mr. Barker said this was not a question affecting the creditors, but was one between man and man. An action had been brought against Jenkinson, and when he saw he had no answer to it, he sought by adopting this course to get an order which he could not obtain in the action. After the document was signed Mr. Leggoe did collect and receive book debts in relation to the George Street business. He had paid various sums out of pocket, and now required 55*l.* 3*s.* 2*d.* to which he was entitled. On December 15 of last year the account was sent to Jenkinson, and from that time until July of this year when he was sued for the amount, he never contended that he had been overcharged. It had been suggested that Mr. Jenkinson had been trapped, but he was not like an infant, he was a man, with a solicitor to advise him, and could have obtained that advice had he required it. He submitted that it would be a great hardship towards Mr. Leggoe if the document were set aside which gave him the remuneration the committee of inspection, now no longer existing, could have awarded him.

Judgment was delivered a week later, when the Judge (T. Ellison, Esq.), after stating the resolutions arrived at by the creditors, said that the committee resolved that the estate should be sold to Mr. Jenkinson, the debtor, for a sum equal to 5s. in the pound, and on June 28 the creditors in general meeting resolved that the offer of the debtor to purchase the estate for 5s. in the pound on payment of all costs of the liquidation, should be accepted. The resolutions passed by the committee were thereby confirmed, provided that the bills of sale given as security should be deposited. They discharged the debtor, closed the estate, and released the trustee. In the meantime it appeared that the trustee and Jenkinson had made certain arrangements. Mr. Barker had, on the part of Mr. Leggoe, objected that the motion was not made in the interests of any creditor, and to a certain extent this was so, but whatever might be the arrangements between Leggoe and Jenkinson, and whether it was one that could be effectually carried out against Jenkinson, he did not think mattered to the motion. It might be that Jenkinson would get rid of that arrangement; but what his Honour had to deal with was, that the motion was founded on—

tirely on the statutory right of the creditors to have the trustee's accounts taxed and audited in the usual way, and to consider whether there was anything in the case which differed from an ordinary case of liquidation. When he heard the resolution he came to the conclusion that they were resolutions which, under the Act of Parliament, had been come to by the creditors, and had received, as being a scheme for the realisation of the debtor's estate, the approval of the Court under the Act. But if it did not extend to liquidation, what right had the creditors to say that the estate should be sold for 5s. in the pound in case any creditor who was not at the meeting objected? The right of the creditors was to have the whole of the estate divided amongst them, and the creditors could pass resolutions for that purpose, and have them approved by the Court; but there was no other power to take the right, and having every sixpence administered to their benefit. This being so, it was simply a case of common liquidation. Under Rule 5th of 1871 all bills and charges of auctioneers, brokers, &c., in matters of liquidation, should be taxed by the proper officers of the court, and no payment should be allowed without due proof of such taxation. It was, therefore, a matter of ordinary course for him to order this motion to be granted; the costs must be taxed in the ordinary way. It might be that the proceedings might be carried out by the debtor and trustee; but it was also possible that a creditor might oppose the proceedings, as never having received the approval of the Court. He should deal just the same as if these resolutions had never been granted at all. His Honour, in conclusion, granted the order prayed for, but, in answer to Mr. Clegg, said that he could not go beyond the notice of motion.

CHARLES LANGFORD, Chemist and Druggist, King's Lynn.

THE first meeting of the creditors of this bankrupt, adjudicated on October 26, was held on the 14th inst. at King's Lynn. Proofs of debt amounting to 4,000*l.* were put in, and resolutions come to appointing Mr. Edward Moore (Moore & Wallis), accountant, 3 Crosby Square, London, E.C., and Mr. William B. Whall, accountant, Market Square Chambers, King's Lynn, joint trustees, with a committee of inspectors, consisting of Messrs. Arnold Baiss (Baiss Bros. & Co.), Charles Harvey (Barron, Harvey & Simpson), C. R. Harker (Langton, Harker & Stagg), wholesale druggists, London, and Mr. L. W. Jarvis, banker, King's Lynn. The proceedings were by special resolution transferred to London. The statement of affairs filed by the bankrupt is summarised as follows:—

Liabilities.

	£	s.	d.	£	s.	d.
Unsecured creditors	3,601	5	3
Creditors partly secured	1,026	9	6
Estimated value of security	35	0	0
				991	9	6
Creditors for rent, rates, taxes, and wages	4	0	0
				4,596	14	9

Assets.

	£	s.	d.	£	s.	d.
Stock-in-trade estimated at	1,500	0	0
Book debts, estimated to produce	850	0	0
Cash in hand	5	0	0
Furniture, estimated to produce	250	0	0
				2,605	0	0

The following is a list of creditors unsecured:—

	£	s.	d.	£	s.	d.
Baiss Bros.	621	2	8
Langford, Wm., Lynn	480	0	0
Herring & Co.	326	3	8
Langton, Harker & Stagg	261	0	3
Barron, Harvey & Co.	318	14	8
Shaw, Thompson & Co., Hull	184	15	5
Wrangham, R. H., Hull	145	0	0
Sutton & Co.	117	0	0
Pileher & Co.	115	0	0
Blindell, Spence & Co., Hull	122	0	0
Taddy & Co.	92	9	1
Beanfof & Co.	89	12	8
Price & Co.	41	2	6
Sissons Bros., Hull	52	19	11
Vickers & Co.	59	3	3
Burnett & Co.	25	14	7
Wm. Mather	24	0	0
Proctor & Bevington	13	0	0
Hamilton & Co.	25	8	9
Gorringe & Son	10	9	6
Simmern & Son	37	10	1
S. Maw, Son & Thompson	30	14	3
W. & T. Jones & Co.	20	0	0
W. S. Champion	5	19	6
Beatson & Co., Rotherham			

	£	s.	d.
Smith & Son, Norwich
Davis
Yardley & Co.
Turner & Co.
Kidd
L'oultier
Carpenter
R. A. Carter, Norwich
J. G. & J. Field
R. A. Cooper
Ibberson, Lynn
Swann, Lynn
Jermyn, Lynn
Jones, Lynn
Ladyman & Sons, Lynn
Fuller, Lynn
Meal, Lynn
Witt, Lynn
Thew, Lynn
Fayers, Lynn
H. B. Phewright & Sons, Lynn
Staunton, Lynn
Wickham & Holland, Lynn
Allen & Willis, Lynn
Botts, Lynn
W. J. Palmer, Lynn

Creditors partly secured.

Jarvis & Jarvis, bankers, Lynn	1,026	9	6
Value of security	35	0	0

G. W. PHILLIPS, Chemist and Druggist, 43 Leather Lane.

THE debtor had filed his petition for liquidation on September 18, and at the meeting of his creditors accounts were submitted, showing debts 1,131*l.* 18s. 1*d.*, and assets, 432*l.* 14s. 2*d.* It was resolved that his estate should be liquidated by arrangement, with Mr. W. C. Harvey, accountant, 1 Gresham Buildings, as trustee, and the following committee of inspection:—Mr. S. J. Fowler, 54 Leather Lane, Mr. H. Leatherdale, 14 Old Jewry Chambers, Mr. C. Chatterley, 25 Old Jewry; Mr. Benjamin Biggs, of 3 Laurence Pountney Hill, and Mr. Thomas Gates, of Hatton Wall. The following were returned as creditors:—

	£	s.	d.
J. Phillips, Waterloo Place, Chatham
Lister & Biggs, Lawrence Pountney Hill
Heaton, Squire & Francis, Coleman Street
Vogl Brothers, 5 Hart Street, Wood Street
S. Fowler & Son, 54 Leather Lane
Hudson & Chidson, George Yard, Aldgate
W. & T. Jones, Southwark Street
T. & T. Gates, Hatton Wall
Nelson, Dalo & Co., Dowgate Hill
E. Gurr, 8 Great Bath Street, Clerkenwell

The case came before the Court on the 7th instant, in connection with a proof for 691*l.* 3s., tendered by Mr. Jesse Phillips, of Waterloo Place, Chatham (the debtor's father), and which had been rejected by the trustee to the extent of 300*l.* Mr. Willis supported the proof; Mr. Henderson, for the trustee, opposed. The claim having been investigated, Mr. Registrar Hazlitt held that the creditor was entitled to prove for the 671*l.* 3s., being a deduction of 20*l.*

A. E. MARTIN, Birmingham.

AN adjourned first meeting of the creditors of A. E. Martin, 136 Broad Street, Birmingham, chemist and druggist, was held on November 22, at the offices of Messrs. Hawkes & Weekes, 14 Temple Street; Mr. William Jones presiding. Mr. Weekes represented the debtor. It was resolved to accept a composition of 1s. in the pound.

BUTTER ANALYSIS.—The prize offered by the Leipzig Pharmaceutical Association for a trustworthy method of butter analysis has been awarded to Otto Hehner, F.C.S., Public Analyst for the Isle of Wight, and Arthur Angell, F.R.M.S., Public Analyst for the County of Hants. As one of the stipulations of the Association, namely, that the successful essay should become its exclusive property, could not be fulfilled by Messrs. Hehner and Angell's method, it having been published some years ago, and as the examiners, Professors Heintz, Knop, and Kohlmann, yet wished to express their appreciation of the method, they presented the authors with the sum of 150 marks. Six essayists competed, two from Germany, two from England, one from Austria, and one from Italy.



For particulars of Advertisements, Subscriptions, &c., please refer to the first page of Literary matter. An Index to the Advertisements contained in this issue will be found in the front portion of the Journal.

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FOR PARTICULARS OF
THE

ANALYSED TEA ASSOCIATION,

And Opinions of the Press,

See Page 49.

EDITORIAL NOTES.

COUNTER PRACTICE.

ALTHOUGH the decisive encounter between the chemists and the apothecaries is again postponed, we are fairly entitled to claim a distinct advantage as the result of the proceedings in the Court of Exchequer on the 22nd of last month. To make this clear we may be allowed to point out exactly both the old and the new situation.

The County Court Judge at Nottingham having heard the evidence brought forward in the case of the Apothecaries Society v. Shepperley, decided to convict the defendant. The Chemists' and Druggists' Defence Association, who were actually defending the action, appealed against the decision, and it thereupon fell to the Nottingham Judge to “state a case” for a superior court. When the case came before the Court of Exchequer it was therefore no longer a question of evidence, but a point of law. The Court of Exchequer was asked, in fact, to decide whether the County Court Judge had correctly interpreted the law in regarding the conduct of the defendant, Mr. Shepperley, on certain specified occasions, as an infringement of the Apothecaries Act.

Now, as Sir Henry James pointed out in the early part of his speech for the appellants at the Court of Exchequer, it is quite possible to regard the defendant's action in a sense as "acting or practising as an apothecary." In fact, a chemist and druggist who simply sells medicine, and who never even opens his mouth, acts to some extent as an apothecary. Such conduct as this even might bring him under the penal consequences of the Apothecaries Act, if it were not for the now well-known 28th section of that Act, which expressly exempts "all persons using or exercising the trade or business of a chemist and druggist, or who shall or may hereafter use or exercise the same," and stipulates that "they shall and may use, exercise, and carry on the same trade or business in such manner and as fully and amply to all intents and purposes as the same trade or business was used, exercised or carried on by chemists and druggists before the passing of this Act."

The crucial question, therefore, as we have all along maintained, was not, did the defendant act as an apothecary on the particular occasions cited against him, but did chemists and druggists act in such manner previous to the passing of the Apothecaries Act? The defence brought forward a witness who distinctly swore that they did. The prosecution made no sort of attempt to rebut this evidence, which, as we say, should have been conclusive, and the judge ignored it!

When the case came on last month before the Lord Chief Baron and Mr. Baron Cleasby, those learned judges saw from the first, at least we think they did, that this exemption clause was the keystone of the dispute. Anyone who will follow carefully their interruptions of Sir Henry James's argument will discover that this was uppermost in their minds. And when at last it became clear that Sir Henry James was determined to narrate with most minute detail the complete history of the Apothecaries' Society, from the Dark Ages downwards, they cut him short by saying in effect, "All this is beside the question. What we want is evidence as to the rights chemists and druggists were in the habit of exercising before 1815." "If you can show," said Baron Cleasby, "going back as far as living memory does, that chemists have been in the habit of dispensing over the counter, it would be very important." "If it should appear," added the Lord Chief Baron, "that in this case the defendant has done nothing more than every chemist and druggist in the kingdom has a right to do, then the judgment is wrong altogether." With this view the learned Barons ordered a new trial, on the understanding that it should be brought before them. The fact that Sir Henry James, for the chemists, eagerly accepted this proposal, while Mr. Day, for the apothecaries, as earnestly opposed it, was pretty satisfactory proof as to which side had gained an advantage.

The consequence is that the trial will now be reheard before a jury in the Court of Exchequer. The important evidence for the defence, which, as we consider, has not been sufficiently regarded, will be again presented, and will, no doubt, be allowed its due weight. And, finally, if it should occur after all that the decision of the Exchequer Court be against the chemists, the latter will have the chance of carrying their case to the highest tribunal in the land, an opportunity which they would not have had if a decision had been given merely on the question of law.

It is much too early yet to be jubilant; but it is our bounden duty earnestly to press upon the trade the value of a cordial, liberal support of the association through whose exertions the chemists have been, and still will be, so powerfully represented. The case now being fought will be a historic one; its gravity as affecting the position of chemists and druggists is incalculable. Such being the case, the committee of the Trade Association, who thoroughly recognise the responsibility of their position at this moment, have resolved that, come what may, the question shall be contested to the extremest limits of the law, or until the

apothecaries shall choose to relinquish their pretensions. There is no empty brag about this. It is simply the resolution of men who are capable of seeing that the present is an occasion when valour is the better part of discretion. The Trade Association has displayed an astonishing amount of energy and zeal during its short career, and it has shown what can be done with a moderate income if the executive is not afraid of spending. But the present enterprise is a great one. The association has undertaken to resist an attack which, if it could have been conducted on chemists in detail, as was intended, would probably have ruined numbers. In such a case the association must be supported.

The Pharmaceutical Council has again gone into committee on this question. This periodical event has ceased to excite much interest of any kind. The council, it is now evident, has quite as much as it can accomplish in arranging *conversazioni* and resisting a few women. It must save money because it hopes, according to its president, to provide for its declining years a comfortable little freehold home of its own—a healthy situation preferred, somewhere out of the way of all worry and turmoil. Like Macbeth the Pharmaceutical Council has a double trust and a double duty, first to the trade and secondly to the public. In both capacities it was bound to resist the dangerous claims of the apothecaries, and its own solicitor urged on a bold policy in reference to counter practice. But there were lions in the way. The doctors who come to the annual dinners might not like it. The defendant, if he had not infringed the law in this case, had perhaps done so on other occasions, an argument as relevant as it would be to prove that Mr. Shepperley's fifteenth cousin had married a chimney-sweep. We have always regretted that the council did not from the first co-operate heartily with the Trade Association in defending the long established rights of chemists in regard to counter practice; but it is at least satisfactory to know that with or without their aid those rights will be defended ably and thoroughly.

ANALYSTS AND JOURNALISTS.

An editorial note was printed in our October number, under the title of "Analytical Discoveries," having reference to some tea analyses which had recently been published over the signature of Dr. Arthur Hill Hassall. Our remarks, no doubt, implied a question as to the genuineness of these analyses. We subsequently received a letter from Messrs. Hassall & Hehner's solicitors, requiring us to retract and apologise, or submit to an action at law. Conscious of having written in perfect good faith, we were not disposed to yield to this coercion. A law suit was imminent, and both sides began to prepare their "cases." Circumstances, however, occurred, which brought us into contact with our probable antagonists. The result of a somewhat long discussion was, that we were invited to examine for ourselves the analyses we had criticised, and new experiments were conducted in our presence to prove that no two samples of one tea will yield precisely similar results. Messrs. Hassall & Hehner, having withdrawn all legal pressure, left us quite free to form and express whatever opinion we might arrive at. This enables us, with the utmost sincerity, to state our conviction that the evidence they offered us was more than sufficient to prove that they had conducted their investigation with perfect honesty; and we cannot, therefore, forbear to add our regret that any words of ours should have supported a suspicion to the contrary. The fact just cited, that variation of analytical results will be obtained from what is practically the same article, is an argument against hasty conclusions from such shifting data; and we further retain our opinion that the publication of an imposing series of decimal fractions is calculated at least to mystify an undiscerning

public. This, however, is not a question for the chemist. All that can fairly be demanded of him is, that he should fairly obtain his results and fairly publish them. We again repeat, in this respect, our unreserved confidence in the work of Messrs. Hassall & Hehner.

To these remarks we willingly add the explanation of the analyses addressed to us by Messrs. Hassall & Hehner. They write as follows:—

In these analyses the amounts of theine, of mineral matter, and of sand differ no more than five-hundredths, six-hundredths, and two-hundredths of a percentage respectively. The amount of moisture in the compressed tea exceeds that in the loose tea by only 0.53, or about half a per cent., while the extractive matter in the compressed tea is 4.10 per cent. higher than in the uncompressed tea; so that the amounts of theine, of mineral matter, and of sand in the two analyses are practically identical, while the fact that both the moisture and extractive matter are somewhat higher in the compressed tea admits of a very simple explanation.

No two analyses made upon the same sample of tea could be expected precisely to agree. Analytical chemistry is a practical science, and it is found impossible to obtain mathematically exact results.

Some latitude is always allowed to the experimenter, and, as a rule, two such results may be said to be well in accordance with each other if they do not differ from each other more than two or three-tenths of a percentage.

In food analysis an even greater margin is allowed, from the nature of the substances and their properties. Every chemist knows how readily tea and similar substances absorb moisture from the atmosphere, the percentage varying with the humidity of the air, and a difference of half a per cent. of moisture would easily be occasioned by even a short exposure in a loose package.

Between the taking of the samples and their analysis usually several days elapse, and in the present case no doubt the compressed tea retained in its firm mass a nearly constant quantity of moisture, while the loose tea lost a trifling amount. It must, moreover, be remembered that even the tea contained in the same chest is never absolutely uniform in composition, the top being more exposed to the atmosphere than the centre, and the finer and more fragile portions of the leaves collecting at the bottom of the chests, and yielding a larger amount of soluble constituents than do the unbroken leaves.

That the amount of extractive matter was higher in the compressed tea than in the loose tea is not only *not* a matter for astonishment, but exactly what should be expected. By the enormous pressure to which the tea is subjected many of the cells of the leaves containing the soluble constituents of the tea are ruptured, so that their contents can readily be dissolved by means of the boiling water used in the analysis, whilst it is a matter of extreme difficulty, if not of impossibility, to remove, by water alone, all extractive matter from unruptured tea. The extractive matter has therefore not been, as you appear to suggest, created by the squeezing; it has thereby merely been made more amenable to the action of the boiling water.

PROVINCIAL PHARMACEUTICAL EDUCATION.

In an address delivered at Glasgow a few evenings ago, Mr. Fairlie urged a revival of the interest in provincial pharmaceutical education. He thinks the Pharmaceutical Society ought to provide some 600*l.* a year for this purpose, divided among, say a dozen centres. If the society has not got the money it should get it somehow. A very good plan, in Mr. Fairlie's opinion, would be to pitch the costly *Journal* overboard, or rather make the members pay extra for that if they wanted it. Mr. Fairlie, as we gather from his arguments, seems to consider that a duty devolves on pharmacists in this matter similar to that which the nation has in recent years recognised as due to its poor and helpless children. The difference lies here: In passing the Education Act the nation acknowledged the right of every British-born creature to exist. If all such are to exist, said the nation further, it will be good policy both for us and for them that they be to some degree educated. The Pharmaceutical Society

on the other hand, is by no means called upon to recognise the right of anyone to be a pharmacist: if it forced any into the trade it would be morally bound to train that person for the calling to which he was compelled. It is, in our view, injurious to the vigour of the young men who enter the trade to teach them that they have the smallest right to expect any system of charity to aid them in their battle of life.

THE POSITION OF HOMŒOPATHY.

In a work recently published in Paris, entitled "*De L'Homœopathie et de ses Progres*," by Dr. Giraud, the author gives the following as an approximate estimate of the success attained by homœopathy throughout the world:—

Countries	Physicians	Pharmacies	Hospitals	Dispensaries	Societies	Journals
North America	8,000	16	16	4	20	10
Germany	600	15	8	10	11	6
England	500	16	5	45	6	3
France	300	14	12	20	1	3
Spain	300	4	1	3	1	..
Italy	250	10	..	5	3	2
South America	250	8	2	25	2	2
Belgium	150	4	..	8	1	1
Portugal	110	5	..	6	..	1
Russia	105	10	1	2

SECRET REMEDIES.

A GERMAN pharmacist, Mr. Edward Hahn, has lately published a compilation giving the results of analyses of over eleven hundred secret remedies and proprietary articles. The information supplied in this volume would be very useful and interesting to our readers, and it cannot be denied that they, above all others, have a right to know the composition of the articles they sell. In this view we have arranged with the author for the right to publish an English translation of this collection, which will of course be copyright. The series will be commenced in our next issue, and will be completed in the course of the year. The collection includes analyses of the best known English, German, French, and American specialities.

COPYING PRESCRIPTIONS AT HOME.

AN American druggist declares that he lately received the following recipe, which his customer explained had been copied from "doctor's book":—

12 grains each of Lactate of iron
Citrate of iron
Strychnine
Sulphate of quinine

Make twelve powders. Take one every four hours.

Asking first if the medicine was for a crocodile or a Christian, the druggist pointed out that it would be hardly necessary to make up all the dozen powders unless a family burying was in contemplation. The gentleman who copied the prescription now knows that citrate of iron and strychnine is not the same as the same articles separated. Even the apparently simple art of copying prescriptions requires some little previous training.

A PETROLEUM SENSATION.

A SEIZURE of a large quantity of petroleum in Birmingham last month necessarily attracted the attention of dealers, and probably more will yet be heard of it.

The Petroleum Act requires that a license shall be taken out in all cases where the oil gives off a vapour not less than 100 degrees, so that measures may be taken for its safety and proper storing

and disposal. Railway companies support the Act by requiring that consignors of oil of that quality must label it "Inflammable," and add their names and addresses. The railway rules likewise stipulate that the consignees after receiving notice must fetch the commodity away from the depôts within a few hours after receiving the notice. The penalties for non-observance of these precautions may be made very heavy, and the convicting magistrates have the power to order the confiscation of all condemned oil.

There is a tendency in human nature to resist any Act of Parliament which at all interferes with our freedom, but in relation to this Act such opposition is a mistake. The Act should be supported by no one more than by the vendor of comparatively small quantities over the counter. Without any fault of his he may be, by the cupidity of wholesale consignors at the place of shipment, subjected to penalties and public exposure which may seriously damage him commercially, even if he (to say nothing of his customers) should have the good fortune to escape an explosion which may blow up his premises and perhaps himself.

Nearly a month ago a retailer of oil in Birmingham was charged with having supplied petroleum to a customer which had exploded in a lamp, injuring one person and setting fire to furniture. The oil was declared by the inspector to be inflammable at 85° Fahr., and the dealer was consequently fined. This petroleum had been drawn from a cask which the retailer had bought from "the agent" under the impression that it had

passed the 120° test. Indeed, the cask was so labelled. The declaration on the label was "Royal Daylight, of 120° test." Some 20 gallons were seized, and afterwards confiscated by the magistrates. It became an easy matter for the authorities to trace the bulk, and this led to the seizure on the railway premises of no less than 12,000 gallons, contained in 325 barrels, of which the market value was from 500*l.* to 600*l.*

Of course it was promptly assumed that perfidious America was the originally guilty party, and a large amount of very good indignation was wasted in various quarters. The extraction of the benzoline is a process which involves a certain pecuniary outlay, and the benzoline when extracted fetches but half the price of petroleum. Benzoline incorporated with the crude oil is therefore a much more profitable commodity than the carefully refined petroleum. This was assumed to have been the case here, and the "Royal Daylight" fell under a thick cloud. The brokers for the importers wrote to the Birmingham papers to express their confidence that there had been a mistake, and the result proved the accuracy of their judgment. A week or two later the Watch Committee had to order the oil to be given up to its owners. The borough analyst had tested it, and he found the flashing point to be between 101° and 105°, the error into which the inspector fell arising, it is said, from the use of a close test instead of an open one. Such astounding carelessness or ignorance can hardly be allowed to end here. The inspector, we imagine, will have to exorcise his newly-acquired knowledge on a more limited scale than heretofore.



W. V. WRIGHT.



JOHN HUSKISSON.

It will probably be pleasing to some readers to have a memorial of two familiar faces lost to us during the year now passing. Mr. Huskisson was some years ago the head of a chemical firm whose history is almost the history of the science itself. Born away back in the previous century, Mr. Huskisson by no means let himself remain there. His firm was always foremost in the practical development of scientific ideas, and as far back as the memory of man will go the name of Huskisson has always been a warranty in regard to chemicals. The reputation of the house will certainly not diminish in the hands of the present accomplished principal, Mr. Henry Owen Huskisson, the nephew of the gentleman whose portrait appears above. Mr. W. V. Wright, whose death we have had to announce even more recently, was in all respects a nineteenth century man. His vigour and self-reliance created a business with surprising rapidity, and though he died long before old age, the firm which he raised from nothing to the very front rank, seems for many years to have lost all the traces of newness, and to have indicated its youth mainly by its energy.

PRESS OPINION.

THE COUNTER PRESCRIBING CASE.

The *Medical Examiner* remarks "that if the 'custom of the trade' is to guide the decision, the chemists will certainly get the best of it. There are, however, among various fraternities, many customs more or less contrary to law, but which are never accepted as excuses for statute-breaking. If, as we believe, the law distinctly forbids chemists to prescribe, it would seem rather absurd that the violation of an Act of Parliament should not be illegal because systematically and openly persevered in."

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The paragraph given by the *British Medical Journal* is a rich specimen of biased reporting. "After a long argument," says this authority, "in the course of which the judges expressed some strong opinions, apparently very unfavourable to the chemists, they declined to proceed to deliver judgment, considering that the facts of the case had not been sufficiently brought out in the case brought before the county court judge, and required that the case should be retried more thoroughly before a superior court."

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The *Medical Press* has a comment on the case in curiously muddled English. We give the paragraph entire, but should be sorry to attempt the interpretation thereof:—"Counter-Doctoring.—The case of the Apothecaries' Company against Shepperly—in other words, the doctors against the prescribing druggists, the delivery of which has been anxiously awaited for the last six months—has aborted, and nothing is produced but a blind legal quibble, an evidence of faultiness of the law and indecision in the judge. The decision of the County Court had been against the druggist-doctors on the ground that, in one instance, Snepperley had not only dispensed, but had been consulted and given advice. The Chief Baron ordered a new trial of the whole affair (a decision which will be eminently satisfactory at least to the lawyers), for the purpose of ascertaining what the 'custom of the trade' was, and whether a consultation and advising actually took place. His lordship, however, expressed a decided view upon the question, which is valuable, if, indeed, as is most likely, some other judge does not hold an exactly opposite opinion. The apothecary, he said, has power to do what a chemist and druggist also has power to do, that is, to make up prescriptions and vend medicines across the counter, and, therefore, so far he may act as an apothecary if he happens to have an apothecary's certificate, or it may be done by a chemist and druggist who has no such certificate, and is not an apothecary. But the question here is whether upon what the defendant has done, which is something more than merely selling drugs or medicines across the counter, because it is his being consulted and giving something in fact to a man who tells him that he has a pain in his chest, or a sore throat, or one thing or another, he thereupon supplies him with medicine. If you can show that that also is within the privilege of a chemist and druggist, although it may be within the privilege of an apothecary also, to hold that this man is liable to this action and subject to the penalty, would be to hold that every chemist and druggist is liable. 'If you can show that (consulting and prescribing) is within the privilege of a chemist and druggist.' It is difficult to see how it can be so, considering that function is, by Act of Parliament, expressly restricted to the apothecary or medical men, and no subsequent Act modifies that restriction. If this be so, we lack the legal brains to understand how the 'custom of the trade' comes in question. It is 'the custom of the trade' to sell adulterated drugs, but, nevertheless, it is illegal so to do." With regard to the first sentence in that comical article we may remark that "the delivery of a case" is an expression peculiar to the writer, the verb "to abort" is a barbarism, a "blind legal quibble" is nonsense, and the assertion of "faultiness of law and indecision in the judge" is a piece of trumpety insolence equivalent to the attempted joke in the last sentence, and worthy only of a person who frankly confesses that he lacks the brains to understand the chief point in the case which he professes to comment on.

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In pleasant contrast with the uncanal opinions expressed by the medical journals, we quote with pleasure the following editorial from the *Globe* of December 5, which gives the position from the point of view of the too much disregarded public.

"The Rights of Chemists.—The Exchequer Division of the High Court of Justice has just ordered a new trial in a case of much social interest, involving the right of a chemist to exercise discretion when selling medicine over the counter to be consumed or not 'on the premises.' The County Court Judge of Northampton (*sic*) was lately asked by the Masters and Wardens of the Apothecaries' Company to convict a chemist in that town for selling a draught to a man with the extraordinary name of 'Thomas Jolly Death,' who complained of a 'sore throat and tightness of the chest.' The chemist said 'I think I can give you something that will relieve you,' and forthwith gave him some medicine, for which the applicant paid one shilling. The County Court judge convicted the defendant under the penal clauses of the Act of George III., passed in the year 1815, commonly known as 'The Apothecaries' Act.' The 28th section of that measure reserved the right, not only to chemists and druggists then living, but to any person who at any future time should carry on the business of a chemist and druggist, to prosecute the same as fully and amply as it had been carried on by chemists and druggists before the passing of the Act. The question now is whether the Northampton chemist, in giving a bottle of medicine to the customer, had not invaded the privilege of a licensed apothecary, or whether he was not within his rights as reserved by the Act of George III. Against the decision of the County Court judge an appeal has been made to the Court of Exchequer, and the Lord Chief Baron and Baron Cleasby have ordered a new trial, with a view to a subsequent reference to the court above. The matter to be decided is of more interest to country practitioners of medicine and to provincial chemists than to their colleagues of the metropolis; but it raises an issue of great importance to those of the public who cannot afford to pay medical fees, and yet who desire the simple form of treatment well known to be applicable to temporary disorders of the system. The law in this case has been set in motion by the Apothecaries' Company, and the defence is undertaken by the Chemists' and Druggists' Protection Society. The penalty sought to be recovered is 20*l.* for each offence, and if the ruling of the County Court judge be upheld, a man who may take poison by mistake may not be able to get an emetic in time to save his life."

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The *Pharmaceutical Journal*, of course, aims above all things else to avoid committing itself. "Whatever may be the result arrived at," says this authority, "we think it right to say that the Pharmaceutical Society as a body has always sought to develop the opinion that the business of the pharmacist should not comprise the prescribing of medicine; this, however, is a matter of principle and of ethics, quite apart from the question as to rights and privileges, and since the right to practise medicine is not barred even by the Medical Act, we cannot perceive that the chemist and druggist is less entitled to do so, if he pleases, than any other member of the community."

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RENEWAL OF PRESCRIPTIONS.

Referring to the new German law providing that no prescription containing a dangerous medicine shall be renewed by a pharmacist without the express order of the prescriber, the *Medical Examiner* says:—"A complaint is not infrequently made by physicians, that when a prescription has once been given they cease to have any further pecuniary interest in it. This is most true, and there is good reason for complaint. In many cases it compels medical men to dispense their own medicines, when they would gladly hand over this duty to the chemists. It has been suggested that chemists should not dispense a prescription twice unless it has been countersigned by the medical attendant, who should receive a fee for so doing. In Germany, where they do these things better than in England, the renewal of all prescriptions containing active ingredients is forbidden by law. Pharmacists may only supply such on the order of the doctor who prescribed and gave the prescription."

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After quoting this, the *Medical Press* remarks:—"Such a proposition is incomprehensible to us, and is, we submit, totally contrary to the equity of the matter. Surely, when a patient consults a doctor, and pays him for advising the best medication for his particular case, he has a perfect right to use that medicine for all time, and it would be monstrous to ask him to pay at each renewal for leave to make use of that which he has

purchased at market value. Moreover, such a law as that which our contemporary suggests would—so far from benefiting the profession—be a great hardship upon them, for it would throw upon them endless trouble and responsibility for counter-signing prescriptions, for which duty they could not reasonably hope to be feed. We quite agree that the lending of prescriptions to other patients is dangerous and unfair, and ought to be forbidden, but it would be quite impossible to put a stop to such practice."



AND

Literary Notes.

Perfumery and Kindred Arts: a Comprehensive Treatise on Perfumery. By R. S. Cristiani, Consulting Chemist and Perfumer, Philadelphia. Philadelphia: Henry Carey Baird & Co.; London: Sampson Low, Marston & Co.

We have received from an American source the volume whose title is printed above. The book, though handsomely got up, is not designed as many perfumery treatises have been, merely to serve as an elaborate advertisement for the manufacturer whose name it bears. To a considerable extent this is a really practical work. In fact, the introductory chapters on the history of perfumes are the weakest part of the production, and the value of the work depends entirely on the usefulness of the actual working formulae which are furnished. Cristiani's treatise is very similar in character to Dussauce's "Perfumer's Guide," also published by Mr. H. C. Baird, some ten years back. Both are very desirable adjuncts to chemists whose trade has extended into the domain of perfumes.

After the inevitable history of perfumes, Cristiani proceeds to describe the materials used in perfumery; and the laboratory and its requirements. Then chapters are devoted to "Tinctures;" "Extracts and Bouquets;" "Aromatic and Toilet Waters;" "Sachet Powders, &c.;" "Preparations for the Skin, including Rouges and Paints;" "Pomades and Cosmetics;" "Hair Oils, Tonics, Dyes, and Depilatories," and "Preparations for Teeth, Gums, and Breath." Flavouring extracts have also a chapter to themselves, and the manufacture of toilet soaps forms a special and prominent feature of the book, occupying several chapters. This section is a very important one, and the manufacture is clearly described, aided by good woodcuts. As an appendix the author throws in a quantity of formulae for syrups, jellies, candies, liqueurs, cordials, domestic wines, &c., as well as flavours and perfumes for cigars and tobaccos. It will be seen from this brief synopsis that the book contains very much of actual business value to most chemists and druggists; and while we may remark that the value of the formulae can only be fully appreciated after actual trial, we are convinced that none of our readers will fail to get their money's worth from this work if they buy it.

THE "YEAR-BOOK OF PHARMACY."

We have received in advance of publication the usual editorial "Introduction" to the "Year-Book of Pharmacy," which has attained an undoubted importance in pharmaceutical literature, and upon the annual publication of which busy English-reading pharmacists are to be congratulated. It is not by any means the least important service which the British Pharmaceutical Conference renders to its members, that it provides them once a year with a simple article which they can digest in an hour, wherein a competent authority condenses for them the most important facts affecting the advance of pharmaceutical science gathered from wide and scattered fields. The Conference would not spend some of its surplus income badly if it were to arrange with its editor to double the regulation 16 pages devoted to this feature, especially as year by year the investigations issuing from the Conference itself attain without some such aid an increasing incomprehensibility.

Mr. Siebold (the editor of the "Year-Book" and author of this Introduction) makes the most lucid narrative that possibly could be made out of the somewhat intractable materials in

reference to the chemistry of the aconite alkaloids. According to him this subject has now been raised "from a condition little better than chaos to a fruitful field of inquiry." Those who recall the contradictory results which opposing investigators maintained with equal confidence at Plymouth may doubt whether chaos has even yet been entirely cleared off the subject.

The chemistry of alkaloids occupies about four pages in all, and the writer goes on to describe very briefly, but in clear and exact language, a great many other results of chemical research, skilfully giving the utmost reasonable prominence to the work of the Conference itself. This difficult work is accomplished with that apparent ease which is the sure indication of very careful labour. We have only to complain that the more distinctly pharmaceutical observations of the year have had to be crowded into a space barely sufficient to mention them. The record of chemical results could not well be compressed into less space, and we hope Mr. Siebold will next year resolve to do more justice to pure pharmacy by giving it another 16 pages all to itself.

A NEW quarterly journal of mental diseases, entitled *Brain*, will be issued early next year by Messrs. Macmillan. The editors will be Dr. J. C. Bucknill, F.R.S., Dr. Crichton Browne, Dr. Hughlings Jackson, and Dr. Ferrier, F.R.S.

THE TENTH EDITION of Beasley's "Pocket Formulary" has lately been published by Messrs. Churchill. It has evidently undergone a careful revision, especially in regard to foreign formulae. We notice also a new appendix, in which are to be found brief notes on the more important novelties in materia medica. This section might have been made very much fuller with great advantage. As it is, it contains only just about as much information as most pharmacists have in their heads, and for which they do not need to refer to books. Beasley, we regret to observe, departs here from his usual accuracy, and twice over refers to *cocoa* leaves in describing the product of the *Coca erythroxylon*.

Pharmaceutical Notes.

COMPOUND MIXTURE OF IRON.

(Original.)

Is it advisable that this valuable mixture should only be prepared as advised by some commentators on the pharmacopœia immediately before dispensing, or may it be kept ready prepared, oxidation being as much as possible prevented by securely stopping it from contact with the air? In other words, is there any method by which with probably only an intermittent demand it may be kept ready for dispensing, and yet sent out with the highest regard to appearance and efficiency? We had been in the habit of meeting the difficulty by the convenient plan of keeping the mixture ready prepared *minus the iron* which was only added when the mixture came to be required for dispensing. Lately, however, we were compelled to inquire into the whole subject from the fact that a quantity of this mixture (*minus the iron*) had lain aside for a considerable period, and we were naturally anxious to know, first, how far the mixture, under the circumstances, still retained its aroma, &c., and second, how far it was capable of effecting complete decomposition of the sulphate of iron when added.

Rightly to appreciate the difficulty it is necessary that we should understand the relation of the several ingredients to each other, more than is expressed by the simple equation $\text{FeSO}_4 + \text{K}_2\text{CO}_3 = \text{FeCO}_3 + \text{K}_2\text{SO}_4$. If this were all the problem would be comparatively easy of solution, for nothing need then hinder the preparation of the mixture *de novo* when required. After much patient investigation and experiment, we are convinced that neither this nor the pharmacopœia process permits of the highest results, as regards appearance and efficiency. To understand this it is necessary to bear in mind that the proportion of carbonate of potash is in excess of what is actually required to decompose the sulphate of iron by a half (less one grain, to be minute) and that this excess of alkali exerts a very important bearing both on the appearance, preservative property and general efficiency of the mixture. It acts in short on the oleoresin of the myrrh, forming a saponaceous emulsion, which tends not only to keep the solid matter of the mixture in suspension, but more especially also to prevent to a very material extent the

oxidation of the carbonate of iron. Following the pharmacopœia plan of adding the sulphate of iron immediately after the trituration of the potass and myrrh, &c., the saponification of the myrrh is not complete, and therefore the mixture cannot be in the most favourable circumstances for preventing oxidation in keeping.

As a matter of fact, the saponification is not complete for a very considerable period, and therefore the longer the various ingredients are in contact previous to the addition of the sulphate of iron the better, provided the mixture suffers no deterioration in other respect, such as loss of aroma, &c. To test this, we laid aside several quantities for different periods, varying from two to four weeks and upwards, taking no more than ordinary precautions to prevent exposure to air and consequent loss in aroma, and we found that if the mixtures did not positively improve, they most certainly did not deteriorate even by the longest period to which we tested them. A much more important point, however, here presented itself, namely, if the carbonate of potass was only slowly acted upon by the myrrh and other oleaginous substances in the mixture, was there as much free carbonate left after lengthened exposure in the mixture as to completely decompose the sulphate of iron? To determine this was in every way more important as it was a more difficult task, not only from the fact that very different results were obtained according to the quality and condition of the myrrh employed in the mixture, but also from the very nature of the investigation itself. If the coarser kinds of myrrh were used, or if the myrrh was in the powdered state, though of the finest quality, the carbonate was always found present in excess, but this was not the case when the very finest specimens of fresh tear myrrh were used. In these last circumstances the carbonate was always acted upon to a very considerable extent, but in no case did we find it acted upon to the full extent of the spare amount, so that the iron was in every case fully decomposed. We conclude therefore that the plan of mixing the various ingredients of this mixture minus the sulphate of iron, and thus preserving it for dispensing purposes, is convenient and sound, and produces a more uniform and efficient mixture than by any other method.

AROMATIC MIXTURE OF IRON.

(Original.)

THE unsatisfactory nature of this mixture as a ferruginous preparation has frequently been commented upon, and we therefore refer to it at present not to add another to the general condemnation which has thus been passed upon it, but to narrate the result of an attempt which we made to improve its character so far as the amount of iron present in it was concerned. By repeated experiment we had determined first that the loss in weight of the iron wire (experimenting on the Pharmacopœia quantities) ranged from a little over one grain to two and a half grains to the half ounce of wire employed; and second, that the actual amount of iron passing into the mixture as soluble tannates was only about .44 grains at the very highest to the twelve and-a-half fluid ounces of mixture. In other words whilst each half ounce of iron wire lost between one to three grains in weight on maceration, only a fraction of this was soluble, and passed through the filter into the mixture, the highest amount obtainable being only .44 grains iron to the twelve and-a-half ounces of the mixture. We cannot at present place our hands on any individual authority on the subject, but if our memory does not fail us we think this to be less of iron in the mixture than some have in other cases made out. Be this as it may, the plan we thought of for increasing the amount of iron in the mixture was simply to macerate all the ingredients entering into the mixture together, under the impression that the wire would be more powerfully acted upon, were the acid present in the tincture of orange peel to come into contact with it along with the other ingredients, during the three days maceration. Two separate experiments gave the loss of iron under these conditions to be as near as possible .5 grains to each half-ounce of wire, and this we found on estimating, as in the previous cases nearly all passed through the filter as soluble tannates. We cannot account for the diminished action of the mixture on the wire under these last mentioned conditions, but the result of the experiments was that we gave up the hope of improving this preparation unless it was an improvement which carried it completely out of the Pharmacopœia.

CONTRIBUTIONS TO PHARMACEUTICAL SCIENCE FROM BLOOMSBURY SQUARE.

At the evening meeting of the Pharmaceutical Society, held on December 5, six papers were read. The first, by the Presi-

dent, Mr. John Williams, F.C.S., dealt with the preparation of pure ethyl nitrite. Nitrous acid gas was prepared by the reaction of nitric acid, and starch, copper, or some other body, and a steady current was passed into cooled absolute alcohol, which is preferable to spirit. The resulting liquid contains nitrite of ethyl, aldehyde, acids, and even malic acid. It was distilled from a waterbath at a very low temperature, and the resulting vapours passed through a series of flasks. The first, empty, condensed any alcohol which might pass over (boiling point 180° Fahr.), the second containing water to wash out the acid, most of the aldehyde, and the last traces of alcohol; the third with some potash solution at the bottom, over which the vapour was allowed to pass. This solution absorbed the last of the aldehyde, and gradually became of an amber colour. Nitrite of ethyl boils at 61° Fahr., so that at the ordinary temperature of the laboratory it is a gas. This gas, purified by the process just described, was then passed over calcium chloride, and into alcohol, which readily absorbs it. The sp. gr. of a 10 per cent. solution of ethyl nitrite in alcohol is at 60° Fahr., .810 of a 25 per cent. solution .824, and of a 50 per cent. solution .850. When treated according to the pharmacopœial directions for the testing of Sp. Eth. Nit., the 50 per cent. gave a result equal to 48 per cent. of ethyl nitrite, the 25 per cent. solution yielded 23 per cent., the 10 per cent. only 5 per cent., and the 5 per cent. solution an appreciable quantity, but not enough to measure. The paper was specially designed to give pharmacists a method of preparing a definite solution whenever it should be required.

The discussion which ensued dealt chiefly with the Pharmacopœial process for the manufacture of spt. æth. nit. Mr. Umuey said that he had found it answer on a large scale, but that special precautions were necessary. Professor Redwood said that if the Pharmacopœia were strictly followed, there was no need for further precautions.

Dr. A. Senier and A. J. G. Lowe were the authors of the next paper on "The Colour of Podophyllum Resin." They conclusively proved that the variety in shade as distinct from that of colour, which is found in commercial specimens of the resin, is due to differences in physical state, and has no reference to chemical or physiological properties. Mr. Martindale made a few remarks, showing that the pharmacopœial preparation contained two resins—one soluble in ether, and of a bright yellow colour; the other insoluble in ether, and of a pale stone-brown.

The next paper on *Rheum officinale* grown in England was by Harold Senior, F.C.S. It treated of the differences in physical characters of East Indian rhuhab, the root of *Rheum raphaniticum*, and of English grown *Rheum officinale*. The experiments made seemed to prove that the English root is of less commercial value than either of the others. Its physiological activity is left to the determination of the doctors.

Mr. W. A. Shenstone made another contribution to our knowledge of strychnine and brucine. His results may be summarised thus:—1. Commercial specimens of brucine always contain strychnine. 2. Pure brucine is not converted into strychnine by treatment with nitric acid. 3. It is more readily purified by recrystallisation from weak acetic acid solution than by fractional precipitation. 4. It is soluble in about 150 parts of boiling water, not in 500, as commonly stated. 5. False Angustura bark contains strychnine, although Pelletier and Caventon deny it. 6. By prolonged boiling or heating with water brucine becomes converted into more soluble products.

Dr. Tilden and Mr. Postans read papers recommending the use of Russian turpentine, on account of its odour and taste being much pleasanter than that of the American or French, and giving some fragmentary facts as to its chemical composition.

A NEW TEST FOR MORPHIA.

In the *Berichte der deutsche chemisches Gesellschaft*, G. Pellagie describes a method whereby very small quantities of morphin may be detected, dependent on the conversion of the morphin into apomorphia. The substance is first dried by a gentle heat, and then dissolved in hydrochloric acid. A small quantity of pure concentrated sulphuric acid is added, and evaporated at 100° to 120° C. in an oil bath. This brings out a purple colour, which is easily recognised by contrast with the carbonised matter. When the hydrochloric acid is evaporated, a new supply of the same is added. The solution is then neutralised with sodium dicarbonate, whereupon a violet colour is produced, which does not change on exposure to the air, and is not

removed by ether. On the addition of a few drops of a concentrated solution of iodine in hydriodic acid, the violet is changed into green, and the green substance is then soluble in ether, with a purple tint. These appearances indicate the presence of apomorphia. Codoia gives similar reactions, but is distinguishable from morphia by other. Brucia, treated in like manner, yields a blue colour when neutralised with the soda salt, which changes to a faint red when the iodine is added.

DETECTION OF MERCURIALS IN ANIMAL SOLUTIONS.

In the "Vienna Medical Year Book" E. Ludwig gives a process which consists in the substitution of copper or zinc in a finely divided condition for the quicksilver. Take 500 c.c. of the suspected liquid, and acidify with 1 to 2 c.c. hydrochloric acid, warm to 50° or 60° C., and actively agitate the mixture with 5 grammes of the metallic powder. The quicksilver falls in about half a minute. The liquid is filtered, and the remaining solid matter is washed and afterwards dried at 50° to 60° C. The quicksilver may be obtained by distillation. Certain animal matters pass over at the same time, which are to be destroyed by passing over red-hot oxide of copper. The author says he has proved this system by more than a hundred experiments. He has detected $\frac{1}{10}$ th of a milligramme of corrosive sublimate in 500 c.c. of wine, 1 milligramme in 380 grammes of liver and in 800 of brain.

CAUTION IN REGARD TO CALOMEL.

M. JOLLY, in *La France Medicale*, records some experiments which indicate the danger of exposing calomel to the light, or of administering or keeping it in combination with unrefined, or partially refined, sugar, which may contain hydrated lime, or acids, or of mixing it with acids or alkalies, or the carbonate of the latter, or with calcined magnesia, as under all these conditions there is a tendency to the formation of corrosive sublimate. Thus, calomel should not be used in the form of particles, or given with jams which contain acids. The carbonates of lime and magnesia have no effect on calomel.

WHY MILK SOURS DURING THUNDERSTORMS.

DR. ILES, of Baltimore (in the *Chemical News*), considers the change in milk due to the ozone formed, which produces lactic and perhaps also acetic acids in the milk, these precipitating the cream.

COPPER IN OLIVE OIL.

OLIVE oil (says Hager's *Pharmaceutische Central Halle*) is often artificially coloured, and sometimes with copper salts. To detect this latter, Caillietet suggests that $\frac{1}{10}$ th grm. pyrogallie acid dissolved in 5 c.c. ether be shaken with 10 c.c. of the oil. If copper be present, a brown colour will result.

French Notes.

A strong case against the dealing in drugs by grocers has come to light. Towards the end of October a workman purchased of a grocer some Epsom salts. Soon after he took them he died, and it was found that instead of sulphate of magnesia he had been supplied with sulphate of copper.

For some weeks past the oysters from the Bassin d'Arcachon have been exhibiting a most unusual violet tint. This has naturally caused some excitement among both oyster growers and oyster eaters. M. Desconrt, a *savant*, has been investigating the cause of the appearance, and finds that it is due to the presence of a minute species of alga, which has a deep violet colour. The long-continued drought is supposed to have favoured in some way the development of the alga. The coloured oysters, it need hardly be said, are in no way injurious. The green oysters so esteemed on the Continent owe their colour to a similar cause. English naturalists have succeeded in producing them at will by feeding the oysters on a certain alga. The colour is in England so associated with poison that although the oysters are sometimes of English origin, and are of peculiarly delicate flavour, they have to be exported to find a market.

We noted some time ago the case of the Lille pharmacist who was detected in the act of substituting cod liver oil and syrup of bark for the syrups of orange "Vannier" and lactophosphate of lime. The pharmacist was fined 50 francs for his act, and appealed. The result of his appeal is that he is further condemned to eight days' imprisonment.

The Société Nationale des Amis de l'Enfance, while they still deem it undesirable to substitute artificial for the natural feeding of infants, have offered a prize of 300 francs for the best essay on the former. The essays are to be delivered to Dr. Alex. Mayer, 17 Boulevard St. Martin, Paris, before October 31, 1878. They must be headed by a motto which must correspond with the inscription on an accompanying sealed envelope containing the author's name and address. The essay must touch on the proper foods for infants of different ages, the most suitable feeding bottles, and the necessary precautions.

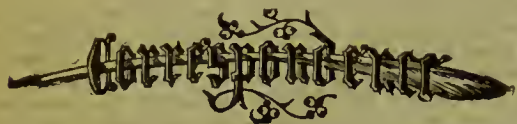
Rumours have been filling the air to the effect that the wife of M. C., pharmacien, of Rue Maubeuge, had been poisoned. The body had been buried, but the rumours grew so thick that the authorities disinterred the body. On analysis of the viscera, which were not nearly so much decomposed as the extremities, it was found that they contained a small proportion of arsenic, and certain poisonous vegetable drugs. The arrest of the pharmacist was resolved on, although during all the preliminary investigations he had maintained a calm and serene appearance, and had insisted repeatedly that his wife had died poisoned by her own hand. He is now in gaol awaiting trial.

That smoking is a very slow poison has received many confirmations, but not often with such conclusive evidence as is furnished by the following anecdote, which we cull from the recently published Dutch experiences of M. de Amici, an Italian. Van Klaes, says our author, nicknamed "the great pipe," having enriched himself in the Indies, took the fancy, on his return, to open in his house a museum containing specimens of all the pipes ever smoked in the world. Visitors to the museum were supplied with catalogues bound in velvet, and departed with pockets filled with cigars. Van Klaes himself smoked nearly five ounces a day. Since his eighteenth year he had consumed more than 9,600 pounds. When he felt his end approaching, he said to his notary, a congenial spirit, "Let us fill our pipes: I shall soon die." He willed that all the smokers in the country should attend his funeral, that they should smoke during the ceremony, and drop the ashes from their pipes upon his coffin. On these conditions he bequeathed them all his pipes and tobacco. He departed this life in his ninety-eighth year, commanding his cook, who hated the smell of tobacco, to smoke a cigarette in his honour, and ordering that a pipe, some canaster, and some corporal tobacco should be enclosed in his coffin, "Who knows," said he, "what may happen."

A brisk encounter in the legal lists between a "pharmacien" and a "médecin" is now going the rounds of the French journals. M. Mauté, of Beaumont-sur-Sarthe (the pharmacien), not long ago commenced an action against a doctor in his district for selling medicines to his clients. The doctor was condemned. But M. Mauté had to appear as a witness before the Court of Appeal at Angers. This involved his absence from home for three days. During his absence he deputed the control of his shop to M. Sœure, who had been for several years assistant to M. Mauté's brother at Mans. Here was a good opportunity! The defeated physician or his friends did not fail to avail themselves of it. Sœure was denounced to the legal authorities for having illegally practised pharmacy, and Mauté was indicted as an accomplice. It appears that Sœure, during the four days he was in charge (June 29 to July 3), sent out in one phial a mixture of syrup of ipecacuanha, distilled water, and carholie acid, whereas the syrup and the solution of acid should have been dispensed separately. On September 27 judgment was passed on the two offenders, condemning each of them to a fine of 500 francs on the counts already given.

They appealed. The Société de Pharmacie de la Sarthe took the matter up, and the case was brought before the Angers Court of Appeal. This tribunal confirmed the decree of that of Mamers. At the hearing of the case, many of the Angers pharmaciens were present. They were warned that they had

no right to leave their shops, and that they were laying themselves open to similar prosecutions. This is not all. M. Mauté was of course obliged to attend at Angers to hear his judgment pronounced. This time, to avoid all appearance of evil, he employed a pharmacien to replace him. The vindictive doctor, guessing that the substitute would leave the shop as soon as the shutters were up, wrote a prescription for one of his patients, and arranged that it was not to be presented until the shop was closed. Fortune favoured him. The medicine could not be supplied in the absence of M. Mauté, who thus committed an involuntary breach of the law; and a summons, drawn up by the doctor and the "maire," was forthwith served upon him by gendarmes. But a clause in the same law exempts from punishment any who are unable, from various uncontrollable circumstances, to supply the needed medicines. It is probable that the appeal in the former case will be carried to higher courts, and great efforts are being made to induce pharmacists to unite to upset this decree, which, if supported, will hind them as surely to their counters as Andromeda was to her rock.



THE PHARMACEUTICAL JOURNAL ON TEMPERANCE.*

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—May I ask the favour of your inserting enclosed letter in reply to the article which appeared in the *Pharmaceutical Journal* on the "Science of Temperance," September 29.

I sent it to the editor, but he declined to insert it, on the ground that it "was considered unsuitable for publication." I then wrote the president of the Pharmaceutical Society, asking him to bring the matter before the Council, to express their opinion as to whether it ought to be inserted or not. He replied that the article had attracted the attention of the Council; that their opinion, "unanimously arrived at," was "that the article was unsuited to the pages of our *Journal*," and that he, as president, had informed the editor of their opinion that my "letter is a very clever one," but thought that, as it "would be very undesirable to devote the pages of the *Journal* to a controversy upon a subject not properly pertaining to pharmacy, I should agree that under the circumstances it would not be wise to publish my letter," to which, in the course of my reply, I said that the editor having had his say, and if no reply was inserted, a tacit acquiescence would be given to it, that there ought to be allowed one letter to show the other side of the question, no further discussion being allowed, and again asked him to bring the matter before the Council. To this I have had no reply, and, as the Council sit in secret, and only vouchsafe to divulge to their members what they please of their transactions, I do not know what is their opinion; but as no reply has been inserted in the *Journal*, may I ask you the favour of inserting it in *THE CHEMIST AND DRUGGIST*, not as in any way embodying your views, or for the purpose of discussion, but to give that fair play which, if not characteristic of the editor of the *Pharmaceutical Journal*, is of most Englishmen. I have not yet seen Fownes' last edition, but am informed that sugar is stated there to be diglucosic alcohol, which is probably what is referred to in the article. This, of course, does not affect the question in the least, as it is not intoxicating.

Yours very truly,

Loose: Nov. 14, 1877.

JAS. S. HICKS.

TO THE EDITOR OF THE "PHARMACEUTICAL JOURNAL."

SIR,—The subject of your Editorial in last week's *Journal* being one in which I take great interest I shall feel obliged if you will allow me, as a member of a Christian Church, who has never tasted alcoholic liquors, to reply.

I shall not attempt to discuss the purely scientific part of the question; to do so might be a proof of my holdness, but certainly not of my wisdom, when men of the standing of Liebig, Richardson, and Paul differ. I must,

* This letter reached us just too late for our last issue, in which another communication of a somewhat similar tenour was printed.

however, confess that it was news to me that sugar is an alcohol, and as it may also have been so to others it would probably be conferring a favour if you would enlighten us on this subject in the *Journal*; but certainly I most strongly demur to your statement that "the Dr. Richardsons work upon the popular ignorance in this matter," for whatever scientific men may say about the question, we have both experience and common sense to teach us, and that is sufficient to show us the wisdom of abstinence. It is certain that alcohol is not necessary to existence. It is a fact that statistics obtained by Life Assurance Companies prove that abstainers live longer than non-abstainers. It is also a fact that the hardest and most laborious work is daily being performed without, as well, ay! better than with alcohol. In connection with the shipping of ores here, where the men have to wheel from the quays to the vessels barrows containing from five to six cwt. of copper ore, the abstainers can do their work quite as well as those who drink.

It may be true, as Liebig states, that a greater amount of food is required by abstainers than by non-abstainers; but that is no proof that alcohol is a food; since opium, which is not a food, has the same effects, for the opium eater uses less food than others. Granted that "animal heat is as important a factor in healthy life as flesh-forming food," it by no means necessarily follows that alcohol is the most economical mode of obtaining it. There are other substances which produce it, in my opinion, with far greater economy, and which are free from the bad effects of alcohol. The Chinaman discovered that it was possible to get roast pork without burning his house to cook his pig, and surely it is possible to obtain animal heat without so dangerous and expensive an expedient as alcohol, and in the Arctic, where the necessity for animal heat is greater than with us, alcohol is unknown, and yet the Esquimaux does not suffer from cold.

Moreover, you say there is a point at which it becomes injurious, but who shall determine that point? especially with the strange tendency on the part of those who take it to do so in dangerously large quantities. Men have not stopped at the point of benefit, but going beyond have drifted into degradation and death. Is this "a matter of consolation and congratulation to human nature?"

If it be true that "a man may bring about worse things than *delirium tremens* by eating nightingales and lamprays," I would entreat him to use a plainer diet, for I have known cases of *delirium tremens* which the descriptions in Dante's "Inferno" only equal, but never have I known, or heard, or read of "bread and butter" having such direful effects. Have you, sir?

To infer from seeing a "vineyard or a hop-garden" that alcohol is a special gift of Providence would be the height of credulity, and reminds me of a man who said to me many years ago, as a most convincing argument against teetotalism, "Teetotalism! then what should we do with the apples?" The agriculturist might ask the same question respecting the barley, and the sugar. Grapes need not be turned into wine to be of service to man; they are not only nutritious but very pleasant eating, even when dried as raisins, and I must confess that a beautiful hop-garden would never have suggested the beer-barrel to me; indeed, to imply that because these things exist in nature, therefore they are to be used as alcoholic beverages, is equal to the inference that because pine trees grow therefore I must drink turpentine.

We have no divine revelation or formula to do so, but God has given us wisdom to take the good and reject the bad. Unhappily, however, natural, plain, and simple tastes have been vitiated, and we are possessed of unnatural tastes and cravings. "God hath made man upright, but they have sought out many inventions," and, alas, some of these have proved a curse instead of a blessing, but what constitutes the difficulty in dealing with the drunk is the "comfortable sensations." It is not the "animal heat" that men seek: there is a deal of truth in—

"This I tell ee,
The seat of empro is the belly."

But there is such a thing, sir, as moral philosophy, which bids us make self-love subservient to conscience.

You say it is "a small minority which consists of drunkards." Nevertheless, it is a fact that alcoholic liquors are doing more to demoralise the people and produce more sin and misery than anything else. I am afraid, sir, that, engaged in scientific pursuits, your life must be somewhat insulated, so that, the sins and sorrows of those around you do not trouble you very much. It is certain, however, that the baneful influence of drink is so widespread that there is scarcely a family which does not suffer from its direful consequences.

Judges have repeatedly stated that most of the crimes are caused by drink, and that, but for it, they would have comparatively little to do, while the misery and suffering it causes are of terrible proportions; indeed so far from there being "a small minority of drunkards," the number is so appalling that it cries aloud for prompt and effectual remedy. I live in a town where there is not more than the average amount of drinking in a county which is one of the most sober in England, but the number of violent deaths caused by drunkenness here would, taking the ratio of the past seven years, amount to an average per year for the United Kingdom of 15,000, to say nothing of the many who have died from diseases induced by drink.

These, sir, were our brethren, however sinful and degraded, and to endeavour to raise such to a higher and nobler life is the highest ambition

we could aspire to; and although you may call us "Quixotic," in the face of the appalling fact, we would not, even if we wished, drink a single glass, but strive to "remove this stumbling block out of the way," and thus stay the fearful ravages that intemperance is working in our land, not merely by attempting to diminish its sale, but to pass laws which prohibit its common sale altogether; and although you may deem it a "waste of life," we have One whose guidance we prefer even to yours, Who says "He which converteth the sinner from the error of his ways shall save a soul from death, and shall hide a multitude of sins."

This will impart infinitely greater pleasure, and give us far more "comfortable sensations" than the choicest wine ever imparted.

Loose: October 3, 1877.

JAMES S. HICKS.

STEAMY WINDOWS.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

DEAR SIR,—It would be a great boon if you could elicit from any of the readers of your journal an arrangement by which the condensation can be prevented from accumulating upon shop windows which are enclosed with sashes inside the shop in the usual way. This is known to be such a nuisance throughout the trade that the whole array of your readers would, I am sure, be grateful if you would set the matter on foot to be well "ventilated," and perhaps some one will thus be able to "dry it up."

Yours truly,
SHOPMAN.

CANINE TOXICOLOGY.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—If your canine toxicologists will use a sufficient quantity of prussic acid, say half an ounce to an ounce, they will find it a certain *coup de grace* for any dog, cat, or other animal.

Having been executioner to numbers of dogs, from fox terriers to mastiffs and never had the least difficulty in despatching them in two minutes, I send you these few lines, hoping they may prevent unnecessary torture to animals, by hanging or uncertain shooting.

I am, yours truly,

Newcastle: December 6, 1877.

DESPATCH.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—From all the valuable suggestions thrown out by your numerous correspondents on the above subject, there seems at present no satisfactory conclusion arrived at. I would, therefore say that during the last seven years I have poisoned scores, from large retrievers down to the smallest fox terriers, and have not met with a single instance of failure, and I attribute my success to the following facts. First, I see that the acid hydrocyanic (Scheele's), is fresh and good; secondly, that I am on the right side by giving sufficient and causing it to be well diffused about the mouth, which I always find produces instant suffocation; and thirdly, when convenient, I place the animal in a coarse hag with just the head out, and then pour into the corner of the mouth two drachms of the acid from a half-ounce phial. If this *modus operandi* be adopted I'm sure failure will be the exception and not the rule.

Yours respectfully,

W. B. CORBLEY, A.P.S.

Colchester: December 6, 1877.

FELINE TOXICOLOGY.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—One Sunday some years ago, being rather late for church, I was somewhat annoyed in being detained looking for my nearly new guinea hat. I at last found it, but to my dismay I discovered that our abominable old tom cat had been using it as a cesspool. I was so utterly disgusted that I determined there and then to swing him. Accordingly, I got hold of a rope and suspended him by the neck to our meat-hook, which hung from the passage ceiling.

Having waited until the poor creature had finished struggling and given up all signs of life, I cut him down, and not wishing

a certain party in the house to know anything about it, I hid the carcass, with the rope round its neck, just as if was, in the coal cellar, and then hastened off to church. What my devotional feelings must have been that morning I leave your readers to judge.

Not caring, as I have said, that the above party should be informed of the affair, I hurried down the first thing on Monday morning to the coal cellar to have the animal put out of the house, when to my great astonishment the cat had vanished, leaving the rope entire behind him. On looking about for the brute, I found him coolly sitting under his mistress' table.

This piece of experience caused me to lose faith in the efficacy of hanging as applied to cats, so I thought I would try my hand the next time on poisons. An opportunity soon presented itself. Being again overrun with animals, having no less than three cats and one dog in the house, I once more determined to do for old tom. Accordingly, I hastily sprinkled a nice piece of meat with arsenious acid, and then enticed Thomas to partake thereof, and quietly waited the result, but on going into the room next morning to see how the experiment had answered, guess my surprise to find the wretch as lively as ever, while the other three animals, which had not been allowed to share in the refreshment, were lying dead on the floor.

The fact was Tom had vomited his portion, and thus for the second time escaped with his life, while the others, interfering with the vomit, became defunct.

Since then I have confined my attention to Scheele's acid for this work, and have found it uniformly successful when fresh.

Your obedient servant,

S. G.

Accidents.

FATAL GUN ACCIDENT IN A CHEMIST'S SHOP.—On Nov. 14 a melancholic occurrence took place at the house of Mr. Thompson, chemist and druggist, Bull Ring, Sedgley. One of the assistants, named Johnson, and young Thompson, a son of the proprietor, had been amusing themselves in the dinner-hour by snapping caps from a gun at the gas. Compstone, another assistant, on returning from his dinner, loaded the gun for shooting birds, and put it aside. Young Thompson, not knowing this, placed a cap on the nipple, and fired it into an adjoining office, where were the two assistants, and two other men, named Wakelam and Fellows. They were prostrated by the shock, and on recovering themselves they found Wakelam lying dead in a pool of blood, one side of his head having been blown clean away. The other three men received several shots in the head and face. An inquest on the body of Wakelam was held the next evening, before Mr. W. H. Phillips, coroner. The jury found a verdict of accidentally killed, and censured the young man Compstone, assistant to Mr. Thompson, for leaving a loaded gun about. Mr. Compstone said he much regretted the occurrence, but he was not aware at the time that the boys had been interfering with his gun.

SERIOUS EXPLOSION IN A CHEMIST'S SHOP AT CRICKHOWELL.—Mr. Robert Harries, chemist, Crickhowell, narrowly escaped having his shop and house destroyed by fire on November 19, under very singular circumstances. On the afternoon of that day Mr. Harries had prepared a quantity of horse powders (containing, amongst other ingredients, nitre, sulphur, and antimony). This was lying on the counter, while Mr. Harries was engaged in weighing and packing it up. In the evening, two neighbours were in the shop, conversing and watching the proceedings. One of them (Mr. Martin, a grocer), being of a scientific turn of mind, determined upon having ocular demonstration of the inflammable nature of the compound; he therefore touched a small portion of it with a lighted piece of paper. To his surprise and consternation he immediately beheld the whole mass in a blaze. Mr. Harries, with much presence of mind, and at great personal risk, pushed the burning heap to the floor of the shop. In a few minutes the heat was so intense that the hundreds of bottles ranged on the shelves and in cases, and the large show bottles in the window, were broken. Some of the woodwork had taken fire, but by prompt measures it was soon got under. Everything in the shop, however, from floor to ceiling, was either completely or partly destroyed. Although the fire only lasted about ten minutes, the damage worked was estimated at not less than 500/. Mr. Harries was insured.

FIRE AT WAKEFIELD.—On the 3rd instant a fire broke out on the premises of Mr. F. Hudson, chemist, Kirkgate, Wakefield, the cause of which may as well be noted. Some paraffin having been spilt on the cellar floor, Mr. Hudson was mopping it up with cotton waste, when a stray thread from the waste became ignited at a light which he held in his other hand, and instantly the whole mass was ablaze. Mr. Hudson was compelled to beat a retreat, and some hampers and boxes took fire, and also the beams in the roof. The fire was soon put out, and a few pounds will cover the damage done.

THE CHEMICAL SOCIETY.

Thursday, November 15, 1877.

Dr. GLADSTONE in the chair.

The President announced that as Professor Odling was unable to attend, his paper on Gallium would be postponed till the next meeting of the society. The following communications were made:—

First report to the Chemical Society on some points in chemical dynamics by Dr. Wright and Mr. Luff. An elaborate series of experiments was made to find out the temperatures at which the actions of carbonic oxide, hydrogen, and free amorphous carbon on oxide of iron or oxide of copper are first perceptible. The authors find that this temperature varies with the physical condition of the oxide used; that hydrogen acts on a given oxide at a lower temperature than carbon, and carbonic oxide at a lower temperature than hydrogen, and that a given reducing agent begins to act on copper oxide at a lower temperature than on iron oxide.

"On the Chemistry of Cocoa Butter." Part I.—"Two New Fatty Acids," by C. T. Kingzett. The first acid is a low acid of the series $C_nH_{2n}O_2$, having the formula $C_{12}H_{24}O_2$, i.e., lauric acid, but it melts at 57.5° . The second acid is a high acid having the formula $C_{61}H_{122}O_2$, crystallising in microscopic needles or granules, melts at 72.2° , and at a high temperature distils apparently unchanged, the author proposes for it the name of Theohromic acid. It is pointed out that the usual statement in books "that cocoa butter yields almost exclusively stearic acid" is entirely incorrect.

The third paper was "On the influence exerted by time and mass in certain reactions in which insoluble salts are produced," by M. M. P. Muir. The author has taken solutions containing known quantities of calcium chloride and potassium or sodium carbonate mixed, allowed to stand for a certain number of minutes and then estimated the quantity of calcium carbonate formed. He has arrived at the following conclusions. That the greater portion of the chemical change takes place during the first five minutes. The reaction then decreases in rapidity; the relative masses of the salts exert an important influence. Thus, if the mass of alkaline carbonate be four times that required, the action is completed in five minutes, but if an equivalent quantity only be present the action is not finished in forty-six hours. Potassium carbonate yields more calcium carbonate in a given time than sodium carbonate. An increase of temperature increases, whilst dilution, especially with solutions of potassium or sodium chloride, diminishes the rapidity of the action. Some experiments are given on the action of solutions of calcium sulphate and sodium chloride. The society then adjourned.

Thursday, December 6, 1877.

The President in the chair.

The following papers were read:—

"On Gallium," by W. Odling. The properties of the metal, its chloride and sulphate, and their reactions were given and specimens exhibited.

"On Nitrification," a report of experiments conducted in the Rothamsted Laboratory, by R. Warrington. Schlesing and Müntz have shown that nitrification is due to the action of an organised ferment, whose action is suspended by chloroform. The author has completely confirmed the above statement, and has proved that carbolic acid and bisulphate of carbon also stop the action of the ferment, and, moreover, that darkness is essential for the process. The author has also succeeded in converting a dilute solution of ammonium chloride into a nitrate, by seeding it with some earth from a fairy ring, and keeping it in the dark for three months.

"On Potable Waters," by E. J. Mills, D.Sc. The author in-

vestigates, with great care, the minute errors incidental to the process of Frankland and Armstrong, suggests a new form of evaporator, and arrives at three natural constants or ratios of organic carbon to organic nitrogen in potable waters.

"On some Derivatives of Allylureton," by J. R. Crow. By the action of sodium a secondary alcohol homologous with allylic alcohol was prepared, its acetate and dihydride were also investigated.

"On a Fourth Method for Estimating Bismuth Volumetrically," by M. M. P. Muir. The bismuth is precipitated as oxalate; the latter on boiling is converted into a basic oxalate; the precipitate is well washed, dissolved in hydrochloric acid, and the solution titrated with permanganate.

"On the Gas of the Grotto del Cane," by T. G. Young. This gas contains 61 to 71 per cent. of carbonic acid, the residual air having the composition oxygen 20.25, nitrogen 79.75.

"Note on Tetrabromide of Tin," by T. Carnelly, D.Sc., and L. T. O'Shea. The body was obtained as a colourless liquid, solidifying to a mass of colourless crystals, melts at 30° Fahr., boils, 201° .

The Society adjourned to December 20, when the following papers will be read:—

"On the Constitution of the Terpenes of Camphor," by Dr. Armstrong.

"Communications from the Laboratory of the London Institution," by Dr. Armstrong.

"Hydrocarbons obtained from Pinus Sylvestris, with some remarks on the Constitution of the Terpenes," by Dr. Tilden.

"On Cuprous Chloride, and the Absorption of Carbonic Oxide and Hydrochloric Acid," by J. W. Thomas.

"On the Action of Reducing Agents on Potassium Permanganate," by F. Jones.

"On Citric Acid as a Constituent of Unripe Mulberry Juice," by Dr. Wright and Mr. Paterson.



WASH BLUE is commonly Prussian blue mixed with enough oxalic acid or ferrocyanide of potassium to render it soluble in water.

PURPLE BRONZE.—Zinc may be bronzed purple by dipping it in a hot decoction of logwood.

LONDON SPENDS ANNUALLY 22l. 17s. per 1,000 for protection from fire. Paris spends 50l. 0s. 6d. per 1,000. New York spends 33l. 14s. per 1,000.

A DUBBING for boots, which is of good quality, may be made by dissolving shellac in strong borax water. This when applied waterproofs them, but does not harden the leather.

TO CLEAN BRASS that is badly fly-specked, try a little fine rottenstone, slightly moistened and applied gently on a piece of chamois skin; or, if the lacquer will bear it, use warm water and the yolk of an egg.

A SENSIBLE DOG.—"Will he take it," we inquired of a German friend, as we handed him a dose for his dog? "Oh, yes!" was the somewhat innocent reply, "he is one sensible dog; he will not object to anything that is for his ultimate good."

"ADVERTISING."—The merchant or business man who don't advertise is like the boy who took green corn to market in a bag. When he was asked by would-be customers what he had to sell, he replied: "It's none of your business."—*Boston Post.*

VARNISH FOR TRANSFERRING is made as follows:—Take mastic in tears, 6½ ozs.; resin, 12½ ozs.; pale Venice turpentine and sandarac, each 25 ozs.; alcohol, 5 pints. Dissolve in a clean bottle or can in a warm place, frequently shaking it. When the gum is dissolved, strain it through a lawn sieve and it is fit for use.

SCENE: The ante-room at the Edinburgh Chemists' Assistants' supper, before the "battle."—Head Waiter, calling distinguished guests to places: "Gentlemen of the Press."—Youngest Apprentice, after a pause: "Press forward"—Head Waiter: "Are the gentlemen of the Press here?"—Youngest Apprentice: "The tincture press?"

AN INK that cannot be erased even with acids is obtained by the following receipt:—To good gall ink add a strong solution of fine soluble Prussian blue in distilled water. This addition makes the ink, which was previously proof against alkalies, equally proof against acids, and forms a writing fluid which cannot be erased without destruction of the paper. The ink writes greenish blue, but afterwards turns black.

THE PATENT PLUMBAGO CRUCIBLE COMPANY, of Battersea Works, London, have forwarded to us their new illustrated list of crucibles, muffles, furnaces, scorifiers, &c. This list is by far the most comprehensive ever published, and we think must be of great value to founders of brass, iron and steel, to refiners of precious metals, and to assayers. We note that the list of articles made for assaying is very complete.

JAPANESE LACQUER is made as follows:—Melt 50 lbs. of Naples asphaltum and 8 lbs. of dark gum anime, boil for about two hours in 12 gallons linseed oil; then melt 10 lbs. of dark gum amber and boil it with 2 gallons linseed oil; add this to the other and add dryers. Boil for about two hours, or until the mass when cooled may be rolled into little pellets. Withdraw the heat and thin down with 30 gallons turpentine. During the boiling the mass must be constantly stirred to prevent boiling over.

TO SILVER IRON.—To silver cast iron, 15 grains of nitrate of silver are dissolved in 250 grains of water, and 30 grains cyanide of potassium are added; when the solution is complete, the liquid is poured into 790 grains of water, wherein 15 grains of common salt have been previously dissolved. The cast iron intended to be silvered by this solution should, after having been well cleaned, be placed for a few minutes in a bath of nitric acid of 1.2 specific gravity just before being placed in the silvering fluid.

EUCALYPTUS ELIXIR.—The following is the specification of a French patent for a new Eucalyptus liqueur, invented by M. Rantien:—Infuse, for a fortnight, 400 grammes of leaves of Eucalyptus globulus in 1,000 c.c. alcohol 96°. In another, 1,000 c.c. alcohol 95°, infuse for a fortnight the following:—Balm, 6 grammes; angelica, hyssop, English peppermint, and canella, of each 2 grammes; nutmeg, clove, and vanilla, of each 1 gramme. Thirdly, make a syrup with sugar, 1 kil. water 1.125 grammes. Add to the cold syrup 800 grammes of infusion No. 2, and a few days later filter. Then add 300 grammes of No. 1. infusion, and after skimming, filter again and bottle.

PURE WATER FOR SCHOOLS.—We are pleased to find that the importance of supplying the drinking fountains in board schools with pure water is becoming recognised. A great deal of water is drunk by the children, especially in hot weather, and the heated condition of their blood whilst at play renders them peculiarly liable to the insidious effects of a tainted or impure water. The Silicated Carbon Filter Co., Battersea, have lately received instructions from the school managers to fit up their main supply filters in several of the existing board schools, and most of the new buildings in course of erection will also be furnished with these very necessary appliances, which are so arranged as to ensure the perfect purification of all the water used. The Orphanage at Woodside, Croydon, recently instituted by the Rev. A. Tooth, has also adopted this mode of filtration.

ACCORDING TO *Trade Marks* "there will be established shortly in Hamburg, and also in London, permanent exhibitions of the principal German articles of industry and commerce. In Vienna, likewise, a similar scheme has been projected for some time. The plan is looked upon with much favour in Germany. The exhibitions are to include patterns, designs, models, drawings, &c. Purchasers will have the benefit of being enabled to refer to the patterns of goods and manufactures, which are not only to form objects of exhibition, but likewise to serve as a basis for the transaction of business, and for judging as to the quality of the articles shown, as well as of their comparative value in competition with what is produced elsewhere." This seems to us to mean that a new commission merchant is about to open business in London.

ACTION OF ALKALIES.—M. Mialhe, says the *Doctor*, has brought this subject once again before the Paris Academy. He thinks alkalies cannot, as normal constituents of the economy, prove injurious. M. Gubler, however, though generally agreeing with M. Mialhe, cannot endorse this, and alludes to the view that excess of oxygen in the respiratory passages may cause death, as maintained by M. Paul Bert. M. Pidoux said he had seen gouty and dyspeptic patients when cured by alkaline waters attacked by bronchial and pulmonary ailments, and on these being cured by the eaux bonnes the lithiasis or gout returned.

TRADE MARKS.—The following agreement has been arrived at between Great Britain and the United States with a view to the reciprocal protection of trade marks:—The subjects or citizens of each of the contracting parties shall have, in the dominions and possessions of the other, the same rights as belong to native subjects or citizens, or as are now granted, or may hereafter be granted, the subjects and citizens of the more favoured nation, in everything relating to property in trade marks and trade labels. It is understood that any person who desires to obtain the aforesaid protection must fulfil the formalities required by the laws of the respective countries. The declaration is dated October 24.

COLOURED BORAX VARNISHES.—It is well known that an aqueous solution of borax is able to dissolve shellac, forming a kind of varnish, to which any desired colour can be imparted by mixing with pigments. Major Dr. Kahl, of Dresden, has communicated to the Dresden branch of the Saxon Society of Engineers the results of a large series of experiments made with these varnishes. He reports that they are very cheap, and dry very quickly, but they scale off from wood too easily. When this varnish is coloured black with India ink and applied to paper, it possesses a fine gloss, but other colours, especially carmine, when mixed with this solution acquire an impure shade, and many pigments cement together in this solution, forming a hard and totally useless mass. The black shoe polish sold for ladies' boots is often made by adding some black pigment to this shellac solution. For bronze boots, rosanilin may be dissolved in any alcohol varnish. — *Scientific American*.

REGISTERED LETTERS AND POST OFFICE ORDERS.—The Post Office authorities contemplate the following changes in the present system of registering letters:—From January 1 it is intended to reduce the registration fee from 4d. to 2d., and to indemnify the owner, provided, of course, all regulations have been complied with, to an extent not exceeding 40s., in case of the letter or the contents being lost during transmission by post. It is hoped that this will save postmen from the temptations to theft too often offered at present by the despatch of unregistered letters containing articles of value. From the same date the commission on money orders for less than 10s. will be raised from 1d. to 2d., the present rate being attended with a very heavy loss to the Exchequer. For the convenience of persons residing in the rural districts, the walking postmen who collect letters will, for the first time, receive letters for registration and give a receipt.

IRIDESCENT GLASS.—Those of our readers who have time for gazing into shop-windows must have noticed a recent addition to our fictile manufactures of a number of ornamental vases, cups, bowls, &c., of clear white glass, covered with beautiful iridescent films of different colours, and marked at unconscionably dear prices. At first it was thought that the process consisted in submitting the glass to the action of a deoxidizing flame, and that the colours—like those tiresome black shams that would always disfigure our first attempts at test-tubes—was caused by the reduction of the lead; but the specification of the patent tells a different story. The inventor of the process is M. L. Clémandot, a French civil engineer, who has patented it in France, England, and America. The principle of the process appears to consist in submitting the glass vessels to the action of dilute hydrochloric, sulphuric, or other acid, under a pressure of from two to six atmospheres. M. Clémandot claims to be able to imitate the beautiful nacreous films on ancient glass which has been submitted to the combined action of air and water for two or three thousand years; but the ornamental vessels already exhibited, although very pretty, are a long way off the poorest specimens of Assyrian or Egyptian glass in any ordinary collection. Time is evidently an important factor in bringing about this singular change. In any case M. Clémandot's productions are very beautiful, but we do not see why they should fetch such exorbitant prices. — *Chemical News*.

TO TRANSFER writing to type-metal, dust the writing while still wet with finely powdered gum arabic. When perfectly dry, dust off the excess of gum, stretch the paper on a smooth level backing, and pour on the fusible metal.

IMPROVED PROCESS IN THE MANUFACTURE OF COPPER AND ITS ALLOYS.—The softness, small tenacity, and want of homogeneity of copper and its alloys prevent their use for many purposes for which they would otherwise be very suitable. Mr. W. E. Everitt has lately patented a process intended to lessen or do away with these defects. In the manufacture of copper or any of its alloys (preferably those of zinc) Mr. Everitt mixes with the copper employed 6 per cent. of black oxide of manganese, or some compound which yields it on being heated. After the copper is melted the manganese is well stirred in, the mixture allowed to stand till the dross separates, and the copper runs off. In making brass the proper percentage of zinc is added to the melted copper. This invention not only renders copper and its alloys harder, tougher, and more homogeneous, but allows them to be rolled at a red heat, effecting an economy both of time and labour. The improved metals are said to be admirably fitted for the manufacture of steam boiler tubes, bearing shafts or axles, axle boxes, sheathing for ships, and bolts and nails for the same, as well as for sheet brass and brass wire.

COATING IRON WITH BRASS.—Zinc-coated or galvanised iron goods have long been known and valued. But they are not remarkably handsome. We do not think of galvanising our door-handles or bell-pulls, but make them of solid and more expensive brass. But iron may be coated with brass just as it can with zinc. It cannot be done so cheaply or so rapidly. But iron articles so treated are as well protected from rust as if galvanised. They are much cheaper than brass, and have a very fine appearance. Herr Hess, in the *Metallarbeiter*, recommends the process, which he says is useful for keys, bells, springs, cast door-plates, statuettes, certain kinds of hollow-ware (if tinned inside and brassed outside they present a fine appearance), smooth turned door knobs, nails, wire, and other goods, used by cabinet makers. The first step in the process is to thoroughly cleanse the article, either by means of emery, or by laying it overnight in a weak bath of sulphuric acid. It is then to be washed with water, and a weak soda solution. It is next to be connected with the zinc plate of a galvanic battery, and immersed in a bath consisting of $2\frac{1}{2}$ parts of sulphate of copper, 20 parts sulphate of zinc, and 45 parts cyanide of potassium, in 300 parts of water. Connected with the other pole of the battery, and immersed in the same bath, should be two plates of zinc and copper of equal size. The colour of the resulting brass coating may be modified by varying the depth of immersion of one or other of the plates. The galvanic current should be a strong one, and the liberation of hydrogen bubbles on the object to be brassed should be plentiful. It is important, however, to note that the objects should be first coppered to insure a strong attachment of the brass coating. This process is therefore virtually electro-plating with an alloy which is made during the process.

Trade Notes.

MESSRS. CORTIE & Co. have started a business at Castle Street, Holborn, for the manufacture of coated pills. They send us a sample and price list of their products. The coating is all that can be desired, both as regards solubility and finish.

WE HAVE received a sample of "Prince's Polishing Powder," a non-mercurial plating powder. It is a very well got up article, a sixpenny box being quite as large and of more imposing appearance than what is usually sold for a shilling. Messrs. May, Roberts & Co., wholesale sundriesmen, of Cow Cross Street, are the agents.

MR. J. M. FAIRLIE, of Glasgow, has taken the agency for Great Britain for the "Patent American Recess Glass Labelled Bottles," which have some special features, both as regards appearance and utility, to recommend them. We refer all persons interested to the price list of these goods in our advertisement section.

THE BUSINESS of the late Mr. John Steward, of Brierley Hill, is now being carried on by Mr. Westwood, late of Dudley Street, Round Oak.

SANITAS.—During the past month the Sanitas works were visited, on the invitation of the proprietors, by a large number of scientific and literary men, to whom the process of manufacture was described and explained by Mr. Kingzett, the inventor. This process has already been fully described in these columns. Mr. Kingzett showed some meat, eggs, and herrings in which putrefaction had set in, but had been arrested by the application of Sanitas. The product seems to be gaining favour. It was largely used at the recent Cattle Show, with considerable success.

ALLEN'S FOOD WARMER.—A simple and efficient food warmer is provided by the apparatus shown in the centre of the accompanying engraving. The whole set complete is almost sufficient to render an infant or invalid independent of the outside world. The stand is supplied with a spirit lamp, but this is removable, and any night-light can take its place. The earthenware pemmican on the top of the stand is intended to contain a supply of food, and the night-light will keep that sufficiently warm through the night. The



kettle and saucepan both fit on the stand in place of the pemmican, and water can be boiled in the one or beef tea prepared in the other in a few minutes. The stand can be bought with either one or all three of the accessories. The makers are Messrs. J. Allen & Sons, 64 and 65 Marylebone Lane, W.

MAGIC FERNS.—A pretty chemical novelty, specially suited for the pharmacist's counter, has been introduced by Messrs. Ayrton & Saunders, of Liverpool, under the title of "Magic Ferns." An envelope tastefully printed in colours contains a number of slips of paper chemically prepared. One of these, twisted in a zigzag form, so that it will stand on a plate, is so placed and lighted without flaming. As the paper burns away, the ashes form themselves into the shape of ferns of an olive-green colour, sloping in quite a natural manner. The experiment is a very attractive one, and chemists should make a Christmas novelty of this invention.

MATHER'S "NIGRINE," we are informed, on the authority of Mr. Mather's own Price Current, "may be truly termed the emperor of all marking fluids, for we believe it is the only marking fluid which cannot be effaced by any chemical means." The most special feature of some recent emperors is that they have been somewhat easily washed out. "But," adds the eloquent writer, as he wrings with his subject, "once marked with this fluid the fabric must be destroyed to efface the name." Why it should be so necessary to destroy the fabric after marking it with this fluid we do not readily perceive. "More than this," we quite agree, "cannot be desired or accomplished." For ourselves, we should hardly desire so much. The "Nigrine" is supplied in 1s., 2s. 6d., and 5s. bottles, the quantity being rather more for money than is frequently given.

WE HAVE received from Messrs. W. & T. Jones & Co., of Southwark Street, a sample of their new "White Star" Southwark Sperm Candles. These are remarkable in possessing the appearance and qualities of the best candles, a high melting-point, semi-transparency, and great brilliancy in burning, at a very moderate price. They are sold in 3 and 6 lb. packages.



[The following list has been compiled expressly for THE CHEMIST AND DRUGGIST by G. F. Redfern, Patent Agent, successor to L. de Fontaine-moreau & Co., 4 South Street, Finsbury, London; and at Paris and Brussels.]

Provisional Protection for six months has been granted for the following:—

Artificial Teeth.—No. 3986.—J. H. Gartrell, of Penzance, Cornwall. An improved apparatus for moulding plates of celluloid, vulcanised indiarubber, or similar material for artificial teeth. Dated October 27, 1877.

Bottle Cap.—No. 4174.—A. C. Whyte, of Glasgow, North Britain. A new or improved cap or stopper cover for bottles. Dated November 8, 1877.

Bottle-Corking.—No. 3810.—J. T. Willett, of the Old Kent Road, London. Improvements in bottle-corking machines. Dated October 15, 1877.

Bottle Stoppers.—No. 4043.—L. Rose, of 11 Curtain Road, Finsbury, London, lime juice merchant. An improvement or improvements in the manufacture of stoppers for bottles for containing aerated or gaseous liquids. Dated October 31, 1877.

Bottle Stoppers.—No. 4263.—J. Cooper, of Huddersfield, Yorkshire, innkeeper, and C. H. Pugh, of Birmingham, stamper and piercer, and machine screw manufacturer. Improvements in apparatus connected with the stoppers of bottles and jars. Dated November 14, 1877.

Cask Stand.—No. 3931.—J. Swindells, of Stockport, Cheshire. An improved stand for casks or barrels. Dated October 24, 1877.

Caustic Alkalies.—No. 4144.—E. W. Parnell, of Liverpool. Improvements in the manufacture of caustic alkalies, and in apparatus or appliances used therein. Dated November 7, 1877.

Corking and Filling Bottles.—No. 3902.—A. Macdonell, of Newry, Ireland, civil engineer. Improvements in machinery or apparatus for filling and corking bottles and other like receptacles. Dated October 22, 1877.

Drying Apparatus.—No. 4019.—F. Wirth, of Frankfort-on-the-Maine, Germany. Improvements in drying apparatus for scientific and chemical purposes. Dated October 30, 1877.

Emptying Bottles.—No. 4116.—G. W. von Nawroeki, of Berlin, Germany. Improvements in apparatus for discharging regulated quantities of liquid from bottles and similar receptacles; also applicable for charging the said bottles with liquid. Dated November 5, 1877.

Extracting Oil.—No. 3964.—H. Martin, of 171 Price Street, Birkenhead, Cheshire. Improvements in apparatus used in oil presses for extracting oil from oleaginous materials. Dated October 26, 1877.

Filling and Corking Bottles.—No. 4168.—F. Clarke, of Canterbury, Kent, engineer. Improvements in machinery for filling and corking bottles and other vessels. Dated November 8, 1877.

Food Preparations.—No. 4032.—O. Morfit, of 23 Southampton Buildings, London, consulting chemist. Improvements in the manufacture of animal and vegetable food preparations. Dated November 1, 1877.

Hospital Beds.—No. 4161.—J. L. Hodgkins, of Beverley Road, Barnes Common, London. Improvements in beds for hospital and similar purposes. Dated November 7, 1877.

Invalid Bedsteads.—No. 4188.—J. Reynolds, of Worcester. Improved apparatus to be applied to bedsteads for raising and supporting the occupant. Dated November 9, 1877.

Lozenge Machines.—No. 4172.—H. J. Haddan, of London. Improvements in lozenge machines. Dated November 8, 1877.

Manufacture of Ice.—No. 4064.—J. Gamgee, of Chelsea, London. Improvements in the manufacture of ice, and in apparatus employed therein. Dated November 1, 1877.

Medicine Boxes.—No. 3842.—J. Rogers, of Walworth, London, wood turner. Improvements in machinery and tools to be used in connection therewith for the manufacture of turned wooden boxes used for medical and other purposes, such improvements being also partly applicable for other purposes. Dated October 17, 1877.

Mineral Gum.—No. 4085.—J. T. Way, of 9 Russell Road, Kensington, London. Improvements in the manufacture of mineral gum, and in its use for stiffening, adhesive, and glazing purposes. Dated November 2, 1877.

Pigments.—No. 3864.—T. Griffiths, manufacturer, of Liverpool. Improvements in the manufacture of pigments. Dated October 18, 1877.

Purifying Coal Gas.—No. 3980.—J. Von Quaglio, chief engineer of the Stockholm Gas Works. Improvements in purifying coal gas from bisulphide of carbon and other sulphur compounds. Dated October 27, 1877.

Refrigerating.—No. 4065.—J. Gamgee, of Chelsea, London. Improvements in refrigerating, or producing cold, and in apparatus employed therein. Dated November 1, 1877.

Salicylic Acid.—No. 4094.—M. Neustadt, of the firm of Neustadt & Co., Mincing Lane, London. Improvements in the manufacture and production of salicylic acid, and in apparatus employed therein. Dated November 3, 1877.

Soap.—No. 3898.—E. P. Alexander, of London. Improvements in the manufacture of soap. Dated October 22, 1877.

Soft Soap.—No. 4158.—H. Simon, consulting engineer, of 7 St. Peter's Square, Manchester. Improvements in the manufacture of soft soap. Dated November 7, 1877.

Spinal Supports.—No. 3798.—Mary S. Seltzer, of Twicken Road, Highgate Road, London. Certain improvements in spinal supporters or apparatus for treating spinal curvatures. Dated October 13, 1877.

Sprinkling Scents, &c.—No. 3959.—H. Sehlberg, merchant, of Moor-gate Street, London. An improved apparatus for sprinkling or dispensing in spray scents, disinfectants, and other liquids. Dated October 26, 1877.

Treating Ammoniacal Liquids.—No. 3992.—F. Wirth, of Frankfort-on-the-Maine, Germany. Improvements in apparatus for and in the treatment of ammoniacal liquids. Dated October 29, 1877.

Treating Oxide of Iron.—No. 4118.—P. Spence, of Manchester, manufacturing chemist. Improvements in the treatment of spent oxide of iron arising from the manufacture of gas, for the purpose of obtaining certain valuable products, and for rendering the said oxide again fit for use. Dated November 5, 1877.

Treating Refuse.—No. 3977.—H. Y. D. Scott, of Ealing, Middlesex, Major-General, C.B. Improvements in the treatment of excremental and other refuse matters containing nitrogen compounds for the manufacture of manures. Dated October 27, 1877.

Urethra Instrument.—No. 3818.—W. R. Lake, of London. Improvements in the manufacture of instruments for introducing medicinal substances into the urethra. Dated October 15, 1877.

White Lead.—No. 4142.—W. Thompson, of 120 Stainbury Road, London. Improvements in the manufacture of white lead. Dated November 7, 1877.

Letters Patent have been issued for the following:—

Ageing Whisky.—No. 1832.—R. J. Wilsoa, of 37 Tritonville Road, Sandymount, Dublin, chemist. A new process for maturing and ageing whisky. Dated May 11, 1877.

Bottle Stoppers.—No. 3278.—J. Cooper, of Huddersfield, Yorkshire, innkeeper. Improvements in bottle stoppers and in apparatus connected therewith. Dated August 29, 1877.

Bottle Stoppers.—No. 3498.—W. North, Shoebridge, Huddersfield. Improvements in stoppers for bottles, and in the means of securing stoppers in bottles. Dated September 17, 1877.

Capsuling Bottles.—No. 3319. E. Belmer, of Cambridge Terrace, Islington, London, engineer. Improvements in capsuling bottles and other like receptacles, and in the apparatus or means employed therefor. Dated August 31, 1877.

Colouring Matters.—No. 3698.—J. P. Griess, of Burton-on-Trent, chemist. Improvements in obtaining colouring matters suitable for dyeing and printing. Dated October 4, 1877.

Corkscrews.—No. 2307.—G. W. Von Nnwocki, of Berlin, Germany. Improvements in corkscrews. Dated June 13, 1877.

Destroying Noxious Vapours.—No. 3365.—T. I. Alberdingk, of Amsterdam, Holland. Improvements in effecting the destruction of noxious vapours or gases, and in the apparatus or means employed therein. Dated September 4, 1877.

Knee-Caps, &c.—No. 2300.—C. Cotton, of 25 Derwent Street, Nottingham, mechanic. Improvements in means or apparatus for the manufacture of elastic fabric to be used in the production of knee-caps and other surgical hosiery and belts. Dated June 18, 1877.

Preserving Anatomical Preparations.—No. 1972.—P. Toninetti, chemist, of Hamburg, Germany. An improved method for preserving anatomical preparations. Dated May 19, 1877.

Preserving Fishes.—No. 1971.—P. Toninetti, chemist, Hamburg, Germany. An improved method for preserving fishes. Dated May 19, 1877.

Preserving Meat.—No. 1973.—P. Toninetti, chemist, of Hamburg, Germany. An improved method for preserving meat. Dated May 19, 1877.

Preserving Milk, &c.—P. Toninetti, chemist, of Hamburg, Germany. An improved method for preserving milk, cream, and butter. Dated May 19, 1877.

Purifying Air.—No. 1868.—H. B. Condy, of Battersea, London. An improved apparatus for automatically disinfecting and purifying the air in sick rooms or other confined places. Dated May 14, 1877.

Refrigerating.—No. 3017.—A. G. Southby, of 3 New Inn, Strand, London, civil engineer. Improvements in the mode of and apparatus for making ice, refrigerating, evaporating, and desiccating. Dated August 8, 1877.

Spiced Vinegar.—No. 3283.—G. J. Hutchings, of Rupert Street, Bristol, wine and spirit merchant. Improvements in the manufacture of spiced or flavoured vinegar, and in the apparatus used therefor. Dated August 29, 1877.

Stoppering Bottles.—No. 2301.—W. Cotton, of Loughborough Leicestershire, manufacturer. Improvements in means or apparatus for stoppering bottles and such-like vessels to contain aerated or fermentable liquids. Dated June 13, 1877.

Sulphate of Alumina.—No. 2834.—A. A. Croll, of Coleman Street, London. Improvements in the manufacture of sulphate of alumina and in apparatus employed therein. Dated July 28, 1877.

Treating Sewage, &c.—No. 3571.—J. Gray, of Glasgow, North Britain, manufacturing chemist. Improvements in treating and utilising sewage and other refuse or waste matters, also in apparatus or arrangements therefor, and also in making preparations of lime therefor, and applicable to other useful purposes. Dated September 22, 1877.

Treating Sludge Oil.—No. 1921.—H. E. Newton, of London. Improvements in treating sludge oil with sulphuric acid, and the product arising therefrom, and in manufacturing paints or varnishes therefrom. Dated May 17, 1877.

Treating Sulphuric Acid Residues.—No. 2993.—J. Mason, of Eynsham Hall, near Witney, Oxfordshire. Improvements in the treatment of certain residues resulting from the production of sulphuric acid. Dated August 6, 1877.

Treating Sulphuric Acid Residues.—No. 3203.—J. Mason of Eynsham Hall, near Witney, Oxfordshire. Improvements in the treatment of certain residues resulting from the production of sulphuric acid. Dated August 23, 1877.

Washing Wool.—No. 2208.—A. P. Rochette, of Petit Quevilly, near Rouen, France. Improvements in washing wool, and in solutions employed for this purpose. Dated June 6, 1877.

Specifications published during the month :—

Postage 1d. each extra.

1877.

1215. J. W. Frond. Refrigerators. 6d.

1273. A. M. Clark. Generating and applying electricity for medical purposes. 8d.

1282. J. M. Hamilton. Preparation of linseed meal. 2d.

1300. J. C. Martin. Manufacture of white lead. 6d.

1301. F. Y. Henderson. Receptacle for imparting or giving off moisture, vapour, or odour. 6d.

1319. J. Scharr. Liquid soap. 4d.

1327. P. A. E. Brémont. Medicated bath apparatus. 2d.

1336. W. Townsend and S. Casson. Bottle and stopper. 2d.

1392. T. J. Smith. Liquid sulphate of alumina. 2d.

1402. R. S. Best and R. Morris. Sulphates of sodium and potassium. 2d.

1405. J. Jackson and T. R. Mellor. Evaporating liquids. 6d.

1414. J. Eckart. Preserving food. 6d.

1438. W. R. Lake. Apparatus for putting up or making packets of Seidlitz or other powders. 6d.

1465. J. Holway. Production of metallic silicides. 4d.

1474. J. Jeyes. Process for preserving meat, &c. 2d.

1536. H. B. Condy. Manufacture of soda. 4d.

1542. G. R. Hislop. Calculus or revivifying spent lime. 6d.

1548. J. Unwin. Preparation and preservation of an electro-depositing solution of nickel. 4d.

1549. F. H. Atkins. Filters. 6d.

1556. W. L. Wise. Preparing caustic alkalies and preparations of alumina. 4d.

1583. C. Clamond. Apparatus for generating electricity. 6d.

1608. L. Sallien. Filtering apparatus. 2d.

1618. F. W. Kalbfleisch. Concentrating sulphuric acid. 6d.

1622. N. and J. Greening. Screening lime for bleaching powder. 6d.

1653. J. H. Johnson. Trusses and abdominal supports. 6d.



BANKRUPT.

SMITH, ANTHONY, Queen Street, Hull, manufacturing chemist. November 15.

LIQUIDATIONS BY ARRANGEMENT OR COMPOSITION.

Notices of first meetings of creditors have been issued in re the following estates.

The dates are those of the "London Gazette" in which the notices first appeared.

ARNOLD, HARRY SHAW, Cwmavon, Glamorganshire, chemist. November 5.

ASHBY, JOHN, St. Andrew's Road and Queen's Road, Hastings, soda-water manufacturer and confectioner. November 27.

AYERS, GEORGE NUTTON, 7 Railway Street, Clunham, mineral water maker. November 14.

BENNETT, WILLIAM WESTON, and BENNETT, ALFRED, trading as Bennet Brothers, 22 Leadenhall Street, London, merchants, and Hawkesbury, near Coventry, chemical manufacturers. November 13.

ORAY, JAMES THOMAS, Mill Street, and Nantwich Road, Crewe, chemist and mineral water manufacturer. November 23.

HANESWORTH, THOMAS HENNY, and HURST, WILLIAM, Tonge Bridge, near Bolton, and Newton Heath, Manchester, chemists and drysalts. November 21.

HARMAN, BERNAL, East Cowes, Hants, chemist. November 22.

PRENTICE, CHARLES WILLIAM, Fortune's Well, Portland, Dorset, chemist. October 19.

RYAN, ALBERT, Wesley Street, Higher Tranmere, surgeon. November 26.

SAMPLE, JOHN, Bondicar Terrace, Waterloo, Northumberland, shipowner, and Blyth, lemonade and soda-water manufacturer. November 7.

SCATTERGOOD, JOSEPH THOMAS, New Brampton, Derbyshire, aerated water manufacturer. November 20.

DIVIDENDS.

ELLISSON, JOHN B. (liq.), Wombwell, Yorks, chemist, 1st and final div. 9s.; W. Sutton, Barnsley, accountant.

LAMBERT, THOMAS D. (liq.), Aysgarth, Yorks, chemist, 1st and final div. 2s.; G. Hndson, Stockton, accountant.

PARTNERSHIPS DISSOLVED.

FOSTER & CHAMBERS, Bishop Auckland, soda-water manufacturers.
 GOODAIRE, GOODAIRE & Co., Halifax, chemists; so far as regards Joseph Goodaire.
 GREENWOOD & SCHOFIELD, Halifax, aerated water manufacturers.
 LEVER, RILEY & RILEY, Nelson, mineral water manufacturers; so far as regards Ambrose Riley.
 SMITH & SMITH, Hove, surgeons.
 WETTE & SCHUCK, Little Tower Street, chemical manufacturers.
 WHITEHOUSE & CUOWN, Stratford, surgeons.
 WIMBLE & BUCKWELL, Maidstone, chemists.

Obituary.

CHARLWOOD.—October 13, 1877, Mr. Edward Charlwood, chemist and druggist, Dale End, Birmingham. Aged 46 years.
 DRESSER.—November 18, 1877, Mr. James Dresser, chemist and druggist, second son of Mr. Richard Dresser, pharmaceutical chemist, York. Aged 29 years.
 FOWLS.—September 20, 1877, Mr. Jabez Fowls, chemist and druggist, Kensington Road, Southport. Aged 46 years.
 GOW.—Nov. 10, 1877, Mr. Alexander Gow, of Dudley Street, Wolverhampton. Aged 79 years. Mr. Gow had carried on business on the same premises for more than forty years, and was the oldest tradesman in Wolverhampton.
 HARGREAVES.—September 17, 1877, Mr. Robert Hargreaves, chemist and druggist, Castle Street, Clitheroe. Aged 58 years.
 HAYLAND.—November 2, 1877, Mr. William Charles Hayland, chemist and druggist, Ousegate, York. Aged 57 years.
 HORNSBY.—November 13, 1877, Mr. Thomas Hornsby, chemist and druggist, Gateshead. Aged 46 years.
 JONES.—July 26, 1877, Mr. Edward George Jones, chemist and druggist, Staines. Aged 45 years.
 JUDD.—October 11, 1877, Mr. Henry Thomas Judd, chemist and druggist, Market Place, Warwick. Aged 48 years.
 KNIGHT.—September 21, 1877, Mr. William Knight, chemist and druggist, Tewkesbury. Aged 69 years.
 LAIRD.—November 5, 1877, Mr. William Laird, pharmaceutical chemist, West Port, Dundee. Aged 52 years. Mr. Laird was President of the Dundee Chemists' Association.
 MACKERETH.—November 15, 1877, Mr. William Henry Mackereth, pharmaceutical chemist, Ulverston, Lancashire. Aged 50 years.
 MAKINSON.—September 30, 1877, Mr. Thomas Makinson, chemist and druggist, Chapel Street, Southport. Aged 31 years.
 MALTBY.—November 12, 1877, Mr. William Battle Maltby, chemist and druggist, Bail Gate, Lincoln. Aged 50 years.
 MANNING.—November 23, 1877, Mr. Thomas Davys Manning, pharmaceutical chemist, Yeovil. Aged 44 years.
 PARSELL.—October 20, 1877, Mr. James Paruell, chemist and druggist, Berry Street, Wolverhampton. Aged 40 years.
 PARMINTER.—November 5, 1877, Mr. Urban Parminter, chemist and druggist, Exeter. Aged 56 years.
 POTTS.—November 24, 1877, Mr. Thomas Potts, pharmaceutical chemist, Grainger Street, Newcastle-on-Tyne. Aged 63 years.
 SHACKLOCK.—September 29, 1877, Mr. James Shacklock, chemist and druggist, South Caves, Yorkshire. Aged 45 years.
 SHENSTONE.—November 3, 1877, Mr. James Byron Burt Sheustouc, pharmaceutical chemist, High Street, Colchester. Mr. Shenstone was President of the Colchester Chemists' Association.
 STERRIKER.—December 2, 1877, Mr. John Sterriker, pharmaceutical chemist, Great Driffield, York. Aged 61 years.
 STEWARD.—November 18, 1877, Mr. John Steward, pharmaceutical chemist, Kingswinford. Aged 61 years.
 STEWARD.—November 18, 1877, Mr. John Steward, chemist and druggist, of 44 High Street, Brierley Hill. Aged 61 years.
 TATE.—July 28, 1877, Mr. Edward Pitt Tate, chemist and druggist, Eastbourne. Aged 40 years.
 TOVEY.—October 20, 1877, Mr. Charles Tovey, chemist and druggist, Cairo. Mr. Tovey was pharmacist in the establishment of His Highness the Khedive of Egypt.
 WARRICK.—November 20, 1877, at the Vice-Consulate, Nice, Mr. Francis George Warrick, late of the firm of Warrick Brothers, Old Swan Lane. Aged 53 years.
 WILLIAMS.—August 27, 1877, Mr. Frederick Augustus Williams, chemist and druggist, Wellington, Somerset. Aged 65 years.
 WILSON.—October 23, 1877, Mr. Richardson Wilson, chemist and druggist, Hesse Road, Hull. Aged 49 years.



TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word.

If name and address are not included, one penny per word must be paid. A number will then be attached to the advertisement by the Publisher of THE CHEMIST AND DRUGGIST, and all correspondence relating to it must be addressed to the "Publisher of THE CHEMIST AND DRUGGIST, Colonial Buildings, Cannon Street, London, E.C." the envelope to be endorsed also with the number. The publisher will transmit the correspondence to the advertiser, and with that his share in the transaction will cease.

FOR DISPOSAL.

Hooper's "Medical Dictionary," 8s. 6d. 1/18.
 Two specie jars, 2 feet high, and 6-gallon carboy; 3l. the lot. 64/156.
 4 gross 4-oz. Eau de Cologne bottles. Offers wanted. Metcalfe, Chemist, Hull.
 Watson, Dentist, Rochester, will exchange large vulcaniser for small one, if good.
Pharmaceutical Journals, 1854 to 1869, unbound, complete, to be sold cheap. 22/94.
 A few thousand large poppy capsules, at 14s. 1,000. Atkinson Chemist, Lincoln.
 Pulvermacher chain band, 31 inches, retails at 40s., been used once. Cash offers wanted. 2/156
 Three cases quart Vichy Water, "Celestins," in stock twelve months, 25s. each. [Yorkshire] 5/90.
 Elegant shop stove, Wright's Patent "Calorifer," equal to new, cost 5l., price 30s. J. Guy, Chemist, Chester.
 Twenty-eight lbs. good English beeswax, for sample enclose stamp. T. Cuthbertson, Lostwithiel.
 Herbarium of 120 indigenous plants, 7s. 6d., carriage paid; Southall's 30s. Materia Medica Cabinet, 20s. 12/96.
 Four and a-half doz. or less, quarts Carlsbad water, 7s. 6d. doz., or in barter, 8s. Cubitt, Norwich.
 Mahogany glass case, similar to fig. 40 Maw's catalogue, in good condition, price 50s. Butler, Chemist, Tuubridge Wells.
 4½ doz. quarts Carlsbad water, 25 per cent. off London price, or in barter. Cubitt, Market Place, Norwich.
The Chemist and Druggist, week old; also Beasley's "Druggist's Receipt Book." Jones, Pennydarran, Merthyr.
The Pharmaceutical Journal from commencement. Apply to H. Roberts, 3 Cedars Terrace, Edith Road, West Kensington.
 Pill machine, 36, marble slab, new, 1l.; cost 2l.; about 3 dozen stoppered bottles, various, 4s. dozen. G. Thomas, Horsfirth.
 No. 1 Pindar's 4-grain piping press, 35s.; Squire's "Companion," eighth edition, 4s. 6d., free; small square tincture press, 5s. 16/96.
 Seventy mounted British plants, 5s. 6d.; prescriptions given to dispense at the Minor, 2s. A. J. Edwards, Mrs. Burden's, High Street, Hythe.
 Bell-metal sal prunella mould, moulding 96 at once, weight 31 lbs.; also one iron mould for cake prunella. Price, 1l. 12s. Dale, Bridge Street, Leeds.
 Three 3-gallon carboys, 22 inches high; 6 cylindrical carboys, 19½ inches high; 2l. for the lot. G. Heal, Chemist, Old Market Street, Bristol.
 Several gross superior white seamless indiarubber teats, quite new; small, 3s. 6d.; medium, 5s. 9d. "Druggist," 3 Clement's Inn Passage, Strand, W.C.
 Southall's cabinet, Bentley's "Botany." Price together, 1l. 3s. Offers wanted. Apply, A. Hartill, chemist, Roseville, near Bilston, Staffordshire.

- Crown Perfumery Company's perfumes, pomades, &c., condition equal to new; large busts of Harvey and Hunter, by Bruziotti. 39/157.
- Leath & Ross's 4l. 4s. case and medicines in exchange for good tooth brush case, or cash. G. Bright, 19 Norfolk Square, Brighton.
- Plaster leathers for sale, about 20 dozen, large size, offers wanted for the lot, samples 21 stamps. 68 Edge Lane, Liverpool.
- Hancock's mixing machine, cost 25s.; no further use; 15s. Plate-glass mahogany counter case, 36 by 16 by 6, 17s. 6d., cheap. Stamp for reply, Appleton, Bolsover.
- Balance, weighs to 1-30th grain, short pan for sp. gr., very cheap, 1l.; *Chemist and Druggist* for 1877. What offers? P. L. Phillips, 371 Bristol Road, Birmingham.
- Austin's pocket inhaler; Wyndham's "Esprit des Oeufs;" Oldridge's balm of Columbia, half price; 1-lb. stoppered bottle Twemlow's chlorodyne, 5s. 27/94.
- Pharmaceutical Examinations.—One of Evans & Lescher's 4-guinea Materia Medica Cabinets, nearly new, packed free, 45s. Moore, 75 Northgate Street, Gloucester.
- In good condition, a complete set of wall fixtures, including drawers and shelving, the latter supported by mirror pilasters. Turner, 110 City Road, Manchester.
- Fine Turkey opium, P.B., in good condition, 18s. per lb. for cash, or would exchange for patents, &c., per arrangement. Address, Robson, Chemist, Grimsby.
- London Pharmacopœia, 1639, Rivers' "Medicino," 1655, Hooper's "Vado Mecum," 1809, all in good condition. What offers? Cash. 10/94.
- Fittings of a laboratory, suitable for a private gentleman or teaching, best German test bottles, platina crucible, gas fittings, about 350 chemicals and apparatus. 15/95
- Judson's dyes, assorted, 2s. 9d. doz., about 1½ gross; outside lamp, sexagon, cheap; good splendid large mahogany upright counter case, cheap. Jenkinson, Chemist, Sheffield.
- Soiled gum arabic, 56s.; red argols, 28s.; dark honey, 26s.; ground pimento for cattle spice, 35s.; Myers' cattle spice 10 per cent. below cost. B. Nowsham & Co., Castle Hill, Sheffield.
- Volumes and odd numbers *Chemist and Druggist* and *Pharmaceutical Journal*, 1860 to 1876, sent anywhere for half-price, carriage paid. Williams, Chemist, Coleford, Gloucestershire.
- A No. 1 set of tooth instruments as Maw's catalogue, page 35, 10s. 6d.; also 2 pairs stump forceps, 3s. each, good as new. H. Thackray, Chemist and Druggist, Honley, near Huddersfield.
- "A Key to Essay Writing," 4d.; arithmetical exercises for Preliminary, 8d.; "Metric System," Judd's, 7d.; "Smith's Guido," new, 3s. 6d. Dispenser, The Infirmary, St. John's Hill, N.W.
- Extra fine Tinnevely senna at 4½d. per lb., in 14-lb. and 28-lb. lots; 24 2-gr. pill machine, nearly new, at 10s. 6d.; Watson's "Principles of Physic," 2 vols., 4th edition, 10s. T. O. Hawthorne, Stafford.
- 40 one and two gallon black store bottles with caps, glass wall case, good mahogany desk, mahogany dispensing screen; very cheap. Read, 2 Market Terrace, Upper Holloway, London.
- A soda-water machine to make about 1,000 dozen per day, with rack, filling machine, dial and water gauges, with 2½ Bramah pump and 8-gallon cylinder; second-hand, in good order. 35l. 10s. 6d. Apply N. G. Wilcocks, Bath.
- Southall's case of Materia Medica specimens, cheap, 20s.; 112 dried plants, indigenous and official, with names and natural orders, 7s.; Lescher's "Elements of Pharmacy," 5s. "Minor," 153 Conybere Street, Birmingham.
- Pharmaceutical stove, similar to one figured in Redwood's "Practical Pharmacy," in good order, with boiler, safety valve, steam pan, condenser, drying closet, &c., complete. Cortis & Son, Chemists, Worthing.
- Royle and Headland's "Materia Medica" (now), 8s.; Watkin's "Portable Cyclopædia" with plates, 5s.; Nicholson's "Dictionary of Chemistry," with plates, 5s. H. Stewart, Bishops' Stortford.
- 40 lbs. Japan wax; 12 bottles ol. citronella; six 23-lb. Capper's ess. limonis; *The Chemist and Druggist* and *Pharmaceutical Journal* for 1876, 1878; quantity of odd numbers; what offers? Bygott, Buxton Road, Huddersfield.
- Two pair tooth forceps and key in case, good, 15s. (cost 30s.). "Cyclopædia Practical Receipts," Cooley, 10s. (cost 30s.). The secret of beautifully coating pills, any colour, 5s. C. Miller, 160 Queen's Road, Aston, Birmingham.
- One cwt. sugar of lead, rather soiled, price 25s.; also 10 gallons genuine orange wine, P.B., price 42s., cask included; also three pairs splendidly polished buffalo horns, one pair measures 7 feet, price 3l. Apply, Hulme, Chemist, Fenton, Staffordshire.
- About 16 gross 4-oz. dispensing bottles, 4th part flat, best quality at 8s.; a second-hand sea medicine chest for 21 men and upwards, similar to Maw's fig. A, 2½ by 1½ by 16½ inches, containing 41 bottles; a bargain, 28s. Andrews, Chemist, Eastbourne.
- Fifty gross camphor-ball boxes, 5ij., 5ss., 5i., 1s. 9d. gross; ten gross 5ij. and 5iv. pomado bottles, without caps, 4s. 6d. gross; 28 lbs. Twemlow's chlorodyne, in 1-lb. bottles, 5s. 6d. lb.; 7 lbs. calomel. Harrop, Chemist, Middleton, Manchester.
- Roscoe's "Chemistry," Hunt's "Photography," Accum's "Chemical Amusement," Galloway's "Chemistry," Buckle's "Leech Conservatory," Cornet-a-Piston, thorough good trichord pianoforte (Kirkman's) 35l.; three years' *Chemist and Druggist*. Wynter, Seaford, Sussex.
- As good as now, post free.—Attfield's "Chemistry," 8s. 9d.; Lindley's "School Botany" (bound), 3s. 9d.; Cooke's "Botany," 9d.; Kirke's "Physiology," 5s.; "Dictionary of Medical and Surgical Knowledge," 3s. 9d.; the *Journal* direct, 7s. A., Middlesex Hospital, London, W.
- Advertiser, giving up sale of tobacco, has 42l. worth (retail value) of cigars in good condition; offers wanted; nothing reasonable refused; or would exchange for good second-hand counter case (Maw's 105 preferred), and desk with case. Bulgin, Chemist, Gravesend.
- For Minor Candidates.—Full botanical description of thirty medicinal plants (including those required for Modified), 2s.; fifty questions asked (with prescriptions given to dispense at the last examinations), 2s.; fresh botanical specimens of plants, in season, fully described, 5s. per set (twelve). Saunders, A.P.S., 79 Gaisford Street, N.W.
- Ruston & Co., Exeter, have laid down larger machines, and offer the following for disposal:—No. 1 Hayward Tyler's machine, in perfect order, 50l.; 2½-horse power horizontal engine, with vertical boiler, 45l.; if sold together 90l. The above have been working up to last month, and are well worth the attention of intending purchasers.
- Handsome bent plate-glass double show case, 2 feet long 2 feet wide, the lower case fitted with two velvet-lined trays, the upper with three plate-glass shelves with polished edges, and mirror doors to each case; good condition, and great sacrifice. Sketch and price on application. H. J., 110 Stokes Croft Road, Bristol.
- 10 ft. 6 nest of mahogany-fronted drawers, 63, at 1s. 6d.; 6 nests, each 32 drawers, mahogany-fronted, 3 ft. 2 long, at 1s. 3d. per drawer; 12 ft. mahogany-top counter, panelled and trussed, 70s.; scales, as fig. No. 6, 9s.; fig. 4, 13s.; fig. 5, 16s.; scales, glass pans, in mahogany boxes, 6s. each. E. Natali, 213 Old Street, E.C.
- Nests of drawers, window enclosures, glazed cases, shop jars, all sizes and colours, show bottles, specic jars, black store bottles, shelving, and other requisites, together or separately; also tobaccoist's handsome show cases, jars, &c.; a capital Wheeler & Wilson's sewing machine, price 2l. 10s.; also a handsome vase of satin flowers, price 3l. 10s. Apply, 294 Old Kent Road.
- Chemist and Druggist*, 1868, except February, 1869, 1870, 1871, 1872, 1873, 1874, 1876, 1877, 22s. 6d.; *Dental Journal*, 1874, 1875, complete, 4s.; the "New Dispensatory," 1753, scarce, 7s. 6d.; Paris's "Pharmacologia," 2 vols., 1822, 4s.; Bell's "Surgery," 2 vols., 1809, 3s.; Wittstein's "Chemistry," 1853 (Darby), 2s. 6d.; Brande's "Pharmacy," 1825, 2s. 6d.; Smith's "Dental Anatomy and Surgery," 2s. 6d. W. P., 12 Sheaf Gardens, Sheffield.

Quincy's "Dispensary," 1724; five volumes *Pharmaceutical Journal*; five volumes bound, from 1870 to 1875; two volumes unbound; several volumes of second and third series; *Chemist and Druggist*, 1874, 1875, 1876, unbound; Proctor's "Pharmacy;" Skellett "On the Cow;" Fownes' "Manual;" Royle's "Materia Medica;" Hooker's "Student's Flora;" "Year-Book of Pharmacy," 1874, 1875, 1876; Thomson's "Dispensary." What offers? J. Archer, Chemist, Lechlade.

Seven ft. dispensing screen, glass case at each side, looking glass centre with marble slab in front, very elaborate, 9*l.*; a 7 ft. 6 ditto, as 165. with carved work, &c., 8*l.*; sponge cases, as fig. 90, 8*ss.*, as fig. 92, 10*ss.*; soda-water stands, 62 and 63, 50*s.* and 60*s.*; desk and case, as fig. 21, 65*s.*; ditto, as fig. 39, 45*s.*; dosks or cases, separate; 4-ft. dispensing screen, looking-glass back, 75*s.*; upright case, to stand on floor, 3 ft. high, 4 ft. long, 12 in. deep, marble top, 90*s.* E. Natali, 213 Old Street, E.C.

A 6 ft. plato glass counter case, as Maw's fig. 105, 7*l.* 10*s.*; a 6 ft. ditto, as fig. 99, 6*l.*; a 6 ft., as fig. 103, 6*l.*; a 5 ft. 9, as fig. 98, 5*l.*; a 3 ft. 6, as fig. 16, 45*s.*; a 3 ft. 8, as fig. 100, 75*s.*; two 3 ft. 6 bent plate-glass counter cases, 12 in. wide, 8 in. deep, 60*s.* each; a 9 ft. flat glass case, 11 in. wide, 90*s.*; several others, all sizes, very cheap; a very elaborate bent plate-glass counter case, 4 ft. long, 20 in. wide, 15 in. deep, looking-glass back, velvet lined, with a plate-glass shelf inside, 6*l.* 10*s.*, a bargain; every requisite for a chemist's shop, very cheap. E. Natali, 213 Old Street, E.C.

British Pharmacopœia and Squire's "Companion," 6th, 7*s.*; Ballard Garrod's "Materia Medica," 4*s.* 6*d.*; Paris's "Pharmacologia" and "Chemical Grammar," 4*s.* 6*d.* (published 46*s.*); Cooper's "Surgical Dictionary," 7th, 6*s.* (cost 30*s.*); Thomson's "Dispensary," 4*s.*; Copland's "Dictionary Medicine," first six parts, 6*s.* (cost 2*l.* 0*s.* 6*d.*); Thomas's "Modern Practice Physic," 3*s.* (cost 18*s.*); Graham's "Diseases Females," 6th, 5*s.* 6*d.* (cost 11*s.*); Churchill's "Midwifery, Diseases Women," 2 vols., 10*s.* (cost 25*s.*); Churchill's "Manuals," Royle, Fergusson, Fownes, W. Jones (published 50*s.*), lot 10*s.* Letters to H. Preston, 21 Clarendon Square, N.W.

A pair specie jars, Royal Arms, gold covers, 24 in. high, 75*s.* pair, equal to new; a pair very handsome ditto, gold covers, 27 in. high, 65*s.* the pair; several others from 50*s.* the pair; one very handsome, equal to new, Royal Arms, gold cover, 34 in. high, 90*s.*, equal to new; three 3-gall. carboys, 6*s.* each; three 4-gall. ditto, 6*s.* 6*d.* each; two 6-gall., cut stoppers and stands, 19*s.* each; 20 doz. shop bottles, 7*s.* 6*d.* per doz.; black stock bottles, 1*s.* 8*d.* each; new ointment jars, labelled, 3-lbs., 2*s.* 6*d.* each; twenty 4-lb. white ditto, labelled, 1*s.* 8*d.* each, good and sound; a quantity of other ointment jars very cheap; mortars, iron, composition, marble; $\frac{1}{2}$ -gall. tincture press, fig. 1, 2-gall. ditto, fig. 2, 30*s.*; 24 pill machines, 12*s.* 6*d.* each; percolators, &c. E. Natali, 213 Old Street, E.C.

The entire fittings of a first-class shop, bottles, jars, fixtures, cases, &c., for 110*l.*, cost 300*l.*, only in use three years; also the fittings of a small shop, price 23*l.*; new plato-glass case, 42 by 20, 75*s.*; new ebonised case, 54 by 20, 85*s.*; new ebonised plato-glass case, 48 by 20, 75*s.*; dispensing screen, ebonised, with tablet on top, about 65 inches long by 26 inches high, mirror in centre, plate-glass, 72*s.* 6*d.*; flat sloping case, new, 30 by 13, 13*s.*; plate-glass case, 24 by 30, 20*s.*; plate-glass case, 27 by 18, 22*s.* 6*d.*; 10 specie jars, 36 inches to top of cover, with handsome glass covers, 70*s.* each, labelled to order, royal or other arms, one or more for this lot only, trade price 130*s.* each, net; a few smaller jars very cheap; ointment jars and bottles, enough to fit a small shop, for 60*s.*; handsome wall case, 7 feet high by $7\frac{1}{2}$ feet long, mahogany, newly done up, 110*s.*; 4 telescope brass enemas, new, 3*s.* 6*d.* each; second-hand brass counter scales, 1 and 2 lbs., 10*s.* 6*d.*, 12*s.* 6*d.*, 15*s.*, 17*s.* 6*d.*, 20*s.*, 25*s.*; two hundred 2nds Wedgwood mortars, all sound inside; handsome round-ended counter screen, Tomlinson's, Manchester, No. 9, equal to new, 6*l.* 10*s.*, ordinary price 10*l.* 10*s.*—R. Tomlinson, shop-fitter and valuer, 15 St. Paul's Square, Birmingham.

Fifty pear-shape window carboys, from 1 gall. up to 14 gall.; 25 handsome gold-labelled specie jars, with gilt glass covers, all sizes; 14 handsome cut-glass show vases, as fig. C Maw's; 50 handsome show vases, as fig. D Maw's, with elegant labels inside, and gilt glass covers, sizes from 10 to 14 in. high; 250 show jars, as fig. A Maw's, sizes from 6 $\frac{1}{2}$ to 23 in. high; 48 show jars, as fig. A Maw's, with elegant labels inside, and gilt glass covers; sixty 1-lb., 2-lb., 3-lb. handsome gold-labelled jujube jars, as fig. 2 Maw's; 35 handsome gold-labelled lozenge jars; 3,000 gold-labelled shop bottles, all sizes, from 2-oz. up to 60-oz.; 15 doz. 20, 30, 40-oz. patent oil bottles, with glass and tin caps; 10 doz. ether and ess. oil bottles, with glass caps, as figs. 9 and 13 Maw's; 35 doz. 20, 32, 40-oz. blue syr. bottles, as fig. 5 Maw's; 250 $\frac{1}{2}$, 1, 1 $\frac{1}{2}$ -gall. black glass stock bottles, with japan and gilt caps; 8 graduated glass percolators, 1-qt., $\frac{1}{2}$ and 1-gall.; 3 gross 3*j.* and 5*j.* graduated glass minim measures; 9 gross graduated glass measures, all sizes, from 5*ss.* up to 40-oz.; 18 doz. graduated mod. glasses, as figs. 4, 13, 14 Maw's; 2 gross $\frac{1}{4}$ -pt., $\frac{1}{2}$ -pt., 1-pt., 2-pt. glass funnels; 6 doz. No. 3, 4, 5, 6 comp. funnels; 300 comp. iron, marble, and glass mortars and pestles, all sizes; $\frac{1}{2}$ doz. circular tea bins; nine 112-lb. circular japanned store canisters; six 10-gall. circular oil cisterns, with brass taps; Gilbert's superior coffee and tea mills; 30 pairs hand tea-scales, with copper bowls; 3 pairs counter scales, as fig. A Maw's; 12 doz. plate-glass shelves, all sizes; lists on application; special prices for this month only. Lloyd Rayner, 333 Kingsland Road, London, N.

The following goods will be sold at a great sacrifice to make room for stocktaking:—Two 20 ft. long, three 18 ft. long, two 16 ft. long, one 14 ft. long, three 12 ft. long, two 10 ft. long, one 8 ft. 9 long, one 8 ft. 6 long, two 8 ft. long, one 7 ft. long, three 6 ft. long, one 4 ft. 6 long, one 3 ft. 6 long mahogany top counters, equal to new; one 8 ft 6 long, one 7 ft. long, one 6 ft. long, one 4 ft. 6 long, one 4 ft. long dispensing counters, with counter-case screens on top; one 18 feet long, one 16 feet long, one 13 feet long, one 12 ft. long, one 10 ft. 8 long, one 10 ft. 1 long, one 7 ft. 3 long handsome mahogany nests gold-labelled shop drawers, with glass and black knobs, lockers under; mahogany-faced shelving with pilasters, cornices, &c., above, with gold-labelled shop bottles and jars, if required, to form complete fittings similar to Maw's 195, 196, 197; two 2 ft. long, two 2 ft. 8 long, one 2 ft. 4 long, two 5 ft. 4 long, two 6 ft. long, one 7 ft. 3 long, one 10 ft. 4 long, one 12 ft. long, one 16 ft. long nests mahogany-fronted gold-labelled shop drawers; one 4 ft. 6 long mahogany dispensing screen, as 155 Maw's; one 7 ft. long, one 6 ft. long mahogany dispensing counter case screens, as 164 Maw's; one 4 ft. long upright counter case, as fig. 40 Maw's; one 8 ft. 6 long mahogany dispensing screen; one 7 ft. long mahogany bent glass wall case, with glass cupboards under and upright case at back, as 210 Maw's; 5 nests counter drawers, from 4 $\frac{1}{2}$ ft. to 12 ft. long, with label drawers, &c.; one 3 ft. 10 long, one 5 ft. 10 long mahogany upright cases, 4 ft. 6 high, 5 $\frac{1}{2}$ in. deep; two 2 ft. $7\frac{1}{2}$ long upright mahogany counter cases, with desks; one 2 ft. long ditto; one 2 ft. 2 long, one 2 ft. 6 long upright mahogany counter cases; one 6 ft. long, one 6 foot 6 long, one 8 ft. long, one 9 feet long, one 10 ft. long, one 12 ft. long, one 20 ft. long handsome mahogany wall cases, with and without cupboards under, similar to Maw's 202, 203, 204, 212; flat mahogany counter cases, two 2 ft. long by 12 in., one 2 ft. long by 13 in., one 2 ft. 6 long by 10 in., one 3 ft. long by 11 in., one 3 ft. long by 14 in., one 3 ft. long by 17 in., one 3 ft. 4 long by 19 $\frac{1}{2}$ in., one 3 $\frac{1}{2}$ ft. long by 22 $\frac{1}{2}$ in., one 3 ft. 5 long by 16 $\frac{1}{2}$ in., one 3 ft. 6 long by 18 in.; flat mahogany counter cases, with bow fronts, one 19 in. long by 13 in., one 3 ft. 2 long by 15 in.; mahogany desk-shape counter case, 20 in. long by 18 in.; bent glass counter cases, one 2 ft. 9 long by 14 in., one 4 ft. 2 long by 12 in., two 3 ft. long by 17 in., one 4 ft. 6 long by 16 in.; five mahogany carved shop chairs; three handsome silvered plate-glass and embossed shop doors; eight handsome silvered plato glass and embossed window enclosures; mahogany label chest, with divisions; 12 drawers, 22 in. long, 20 in. high, 11 $\frac{1}{2}$ in. deep; 10 mahogany vial stands; 3 doz. mahogany test tube stands. Lloyd Rayner, 333 Kingsland Road, London, N.

WANTED.

- A check till. 7/157.
 Hooper's "Medical Dictionary," last edition. 2/18.
Lancet, weekly, posted free. Metcalf, Chemist, Hull.
 Globe lamp and bracket, coloured discs. State terms to 8/86.
 A large safe, in good condition. Particulars to Gwilym Evans, Llanelly.
 Bentley's "Botany," second-hand, latest edition. Wynter, Senforf, Sussex.
 Soda-water machine, a second-hand one. "Chemist," 34 High Street, Putney, Surrey.
 Beasley's "Druggist's Receipt Book," late edition, in good order. Matcham, Chemist, Corn Hill, Ipswich.
 Mayhew's "Illustrated Horse Doctor," White's "Veterinary Art," by Spoon; both last edition. 17/96.
 A few gross dispensing, also a few dozen 2, 4, 6, and 8-ounce pomade bottles. Delivered free in Glasgow. 34/92.
 Two dozen 3-inch dark-blue and white ointment jars, flat covers objected to. S. Davies, Bridge Street, Manchester.
 Good counter scales; also few dozen shop bottles, cheap. Particulars and price to Williamson, 300 Bute Street, Cardiff.
 The whole or part fixtures and fittings of chemist's or surgeon's, with or without stock. Thomson, 20 Albright Street, Surrey Square.
Chemist and Druggist, January and February, 1871, and January, 1872. State price. Scruby, Handley Villa, Acton, W.
 Lecch aquarium in exchange for shop round bottles, brass counter scales on mahogany box, or chemical books. Geldard, St. Austell.
 A trustworthy list of merchants and foreign buyers in the colonies, &c. Address, Mr. Roan, 4 Lucretia Road, London, S.E.
 Dispensing screen, six feet long by about three feet high, to open at front; good and cheap; cash. Send diagrams, with particulars. 14/95.

FORMULÆ.

- Formula for sauce, one of the best made, 5s.; glycerine jelly, a capital form, 1s. 6d.; Roudeletia, as good any maker's, 1s. 6d.; marking ink, A 1 form, 1s. 6d. 15/96.
 Twenty recipes for horse and cattle medicines, the result of 30 years' veterinary practice, 5s. Recipes for excellent lavender water, and cold cream, 1s. the two. "Chemist," care of Mr. Filtress, Rotherfield.
 Lime juice and glycerine that will not separate, beautifully white, price 2s. 6d.; furniture cream, very good, 1s. 6d.; first-class tie tincture, an excellent preparation, 2s. 6d.; or the three for 5s. 39/96.
 Some excellent recipes for pill coating; Brilliantine hair tonic; crimson marking ink; 12 stamps each, or the four for 3s. An excellent recipe for indelible marking ink (jet black), price 2s. Apply to Mr. Watson, 1 Bedford Street, Gloucester.
 Furniture paste, very superior, cleans and puts a brilliant gloss on polished or other furniture, &c., 2s. 6d.; baking powder (original), 2s. 6d. The excellence of these preparations seen for them a largo sale; profits good. Reference or sample post free on application. H. Hare, 81 South Street, Goole.
 Coating pills, 5s.; neuralgic paint, 2s. 6d.; neuralgic pills, 2s. 6d.; soothing syrup, 2s. 6d.; a celebrated proprietary cough mixture, 2s. 6d.; inseparable lime cream, 2s.; brilliant furniture cream, 1s.; excellent baking powder, 1s.; the above are thoroughly tested by thirty years' experience. 37/96.

ADDRESSES AND INFORMATION WANTED.

- Mrs. Louisa Evans, late of Staines, formerly of Ramsgate; buys morphia largely. 13/96.
 Present address of Drumburg & Co., late of Albert Buildings, Queen Victoria Street, London, agents for Giffey's Milk Food. 3/300.
 Mr. J. T. Walklate, Chemist, late of Mount Pleasant, Stoke-upon-Trent, by G. Treble & Son, 42 Gloucester Street, Hoxton, London.



THE declared value of British and Irish exports for the month of November amounted to 16,753,361*l.*, which was again better by 212,737*l.* than in the corresponding month of 1876. The total value of our exports up to the end of November was 182,789,576*l.*, which is 2,535,772*l.* less than in the corresponding portion of last year, and 23,355,251*l.* less than in the first eleven months of 1875. It is therefore pretty certain that the year's results will not equal those of 1876. At the same time it is satisfactory to note that we are not apparently getting worse. The current is a decided improvement on the first half of the year, and it must be always remembered that the figures given, indicating as they do value, are not consequently correct in reference to volume of trade.

The past year has been an exceedingly dull one commercially, but as we have several times pointed out, notwithstanding the universal complaining which the traders of this country have indulged in, there is reason to doubt whether to the majority at least the last year or two have not been really money-making times. Our imports keep increasing. A bad sign, say some. But it is a certain fact that those imports have to be and actually are, distributed by the retailers of the country. Then as to prices. Manufacturers and their workmen have had to suffer, no doubt. But have the public obtained all the benefits of the reductions? We very much doubt if in the general chorus of complaint retail dealers of any class, except those very exceptionally situated, have much right to join. A writer in the *Times* has shown recently the improbability of other nations permanently damaging our foreign trade, to say nothing of competition at home. The displacement of England's 200 millions worth of annual produce means an investment of capital which could not be reckoned at much less than a thousand millions. And there is no nation in the world at all able to approach this sum, not to mention the advantages possessed by this country in the established arrangement of a vast and complicated division of labour. It is well to have a glance at the bright side of things occasionally; and, of course, we must not forget that every progress is marked by occasional recessions. We need not be too much exercised, therefore, by the predictions of those pessimist prophets who foresee the ruin of England in the decline of her export trade. The writer in the *Times* showed that according to the best estimate that could be made the annual income of this nation, the aggregate income, might be reckoned at about 1,200 millions. When it is remembered that our foreign exports only amount to something like 200 millions, and that from that sum a not inconsiderable amount must be deducted for raw material, it is evident that England could stand the loss of the half or even the whole of her export trade, and yet remain a great and prosperous nation. This fact is worth remembering, and should be borne in mind by those manufacturers who are apt to treat the home trade with a certain sort of contempt. But none of these arguments should make British manufacturers relax for a moment in their efforts to hold the splendid heritage which their fathers have won for them by their courage, their untiring enterprise, and, above all, by their sterling integrity.

The course of business in the chemical markets has shown no special feature to indicate improvement. The demand is about equivalent to that generally experienced at this time of the year, but buyers are fixedly determined to order no larger quantities than they actually require. As makers are very

much in want of regular occupation, the result is an unsteadiness in the quotations.

	Stocks		Imported		Deliveries	
	1877	1876	1877	1876	1877	1876
Aloes.....cs	1,969	2,229	2,165	3,526	2,560	1,950
".....kegs	14	31		1	11	1
".....gourds	2,457	1,875	2,980	2,447	2,182	1,556
Aniseed, Star.....chts	981	516	263	1,398	1,049	1,123
Arrowroot.....cs	13,528	10,399	15,911	16,377	11,793	11,999
".....bxs & tins	6,611	4,295	10,286	9,002	7,859	6,759
Balsam.....cs, &c.	242	422	511	741	625	504
Bark, Medicinal.....cs, &c.	1,193	156	3,510	707	2,467	677
".....srus, &c.	10,325	8,562	26,327	30,355	24,678	38,291
".....Tanners'.....tins	4,674	4,900	8,761	11,019	9,010	8,354
Borax.....pkgs	1,025	1,315	429	3,450	805	4,002
Bees' Wax.....bls & srus	457	381	299	485	266	515
".....cs & cs	1,431	816	2,366	2,088	1,905	1,711
".....cakes	48	145	188	978	259	1,569
Japan vegetable.....pkgs	6,447	4,663	5,459	6,146	6,544	7,576
Camphor.....pkgs	5,605	6,204	6,120	7,651	6,822	8,717
Cardamoms.....chts	601	824	507	1,542	737	1,281
Cocculus Indicus bgs, &c.	2,419	2,494	672	1,181	502	985
Colombo root.....pkgs	615	721	375	235	473	422
Cream of Tartar.....cs	85	64	293	265	241	267
Cubebs.....bgs	349	281	192	216	63	509
Dragonsblood.....chts	153	64	238	189	145	162
Galls, B.I.....cs & cs	3,921	1,541	7,306	6,058	4,967	4,800
Mediterranean.....sks	573	1,784	1,115	1,359	955	1,146
Gum—						
Ammoniac.....pkgs	489	500	184	33	183	145
Animi & Copal.....	8,387	4,282	10,832	3,827	7,316	7,968
Arabic, Barbary.....	1,026	988	2,633	2,224	2,613	2,125
Turkey.....	210	791	1,151	1,563	1,226	1,672
E.I.....	1,795	1,421	3,219	2,878	3,070	2,664
Asafetida.....	305	364	467	335	514	580
Benjamin.....	990	657	1,670	1,802	1,287	1,601
Damar.....	1,137	2,097	1,817	5,170	2,834	3,692
Galbanum.....	35	46	15	24	12	7
Gamboge.....	175	247	257	464	321	374
Guaiacum.....	45	13	180	136	144	153
Kino.....	13	18	5	10	10	16
Kowrie.....tins	789	875	1,423	1,564	1,446	1,641
Mastic.....pkgs	108	106	26	43	28	101
Myrrh, E.I.....	282	291	440	427	410	372
Olibanum.....	3,207	1,715	8,127	6,363	6,869	6,719
Sandarac.....	218	252	1,196	1,211	1,494	1,519
Senegal.....tins	10	17	2	5	10	29
Tragacanth.....pkgs	208	151	845	223	698	218
Ipecacuanba.....cs & bgs	243	162	475	454	355	561
Jalap.....bls	566	626	345	280	429	358
Nux Vomica.....pkgs	1,407	1,481	1,846	4,291	1,947	5,092
Oil—						
Castor.....cs	—	—	4	213	4	242
".....cs	4,528	3,829	15,480	16,347	16,403	15,436
".....dpprs & tins						
Palm.....tins	431	583	2,127	2,644	2,203	2,926
Cocanut.....	2,577	2,685	9,918	9,437	10,180	10,410
Olive.....cs, &c.	1,424	627	5,571	3,158	4,612	3,740
Aniseed.....cs	306	209	575	761	488	586
Cassia.....	828	192	705	30	277	144
Opium.....chts, &c.	1,536	952	—	—	—	—
Plumbago.....tins	3,471	3,810	1,946	2,163	2,274	2,404
Rhubarb.....chts	1,056	815	1,823	1,812	1,675	1,732
Safflower—						
Bengal.....bls	1,881	2,292	829	963	1,477	2,015
Bombay.....	297	378	12	19	77	4
Persian.....blts	485	607	20	—	141	—
Saltpetre, Pt.....tins	4,742	5,474	8,096	9,573	8,714	10,177
Sarsaparilla.....bls	1,026	1,077	2,486	2,749	2,375	2,400
Senna.....bls, &c.	3,311	2,266	4,534	1,808	3,723	2,291
Shellac.....cs, &c.	39,491	25,363	42,453	39,129	29,564	32,341
Terra Japonica, Gambier tins	1,586	939	7,375	7,019	6,726	6,365
Cutch.....	2,329	2,818	2,108	2,385	2,506	2,537
Turmeric.....	1,134	350	2,254	1,465	1,755	1,526

Soda crystals have sold steadily at 72s. 6d.; ash also keeps at last month's quotations; bicarbonate is slightly easier at 10s. to 10s. 3d. Potash salts unchanged. Tartaric acid is firm, foreign crystals bringing 1s. 4½d., English 1s. 5d. Citric has been freely bought during the past fortnight, and buyers are now willing to pay 2s. 4d., but sellers demand 2s. 5d. Arsenic has advanced to 9s. to 9s. 3d. for powder. Refined saltpetre is a shade easier. Slightly lower quotations are given for refined borax, Californian selling at 35s. to 37s., and English refined 38s. 6d. to 40s. Bleaching powder sells steadily at 6s. 3d., delivered. Contracts for delivery in London during the whole of next year can be made at an advance of about 6d. per cwt. on that price.

Quinine makers are not yet in want of orders, and at late sales quinine-yielding barks were taken readily at fractionally

better rates. The recent advance in iodine is maintained, but speculative dealings in that product have ceased for the present.

Quicksilver is a trifle lower, and mercurials are 1d. less than last month.

A steady business has been transacted in drugs, but with very few noteworthy changes in price. Sales of opium show no advance, and the Smyrna holders seem likely to be balked of the extra profit they hoped to make out of the war panic. Camphor has dropped again, China having sold at 80s. and Japan at 82s. 6d. Some good buchu leaves have been in the market and have realised rather high prices, as much as 1s. 7d. having been obtained for long narrow green. Broad leaves have sold down to 1½d. Castor oil has been more in demand, and almond oil keeps its advance. Cod liver oil, on the contrary, is rather lower. American peppermint is now offered cheaper, but aniseed has slightly advanced. Musk is slow of sale and rather lower for China kinds.

At the periodical sales of isinglas, held at the beginning of this week, there was a much larger supply of Brazil than for some time past, and prices declined 3d. to 4d. per lb. for all good to fine qualities, and 2d. for ordinary. West India sold 1d. to 2d. cheaper. The larger supply of East India was nearly all sold with good spirit, Bombay tongue at irregular prices, and cake below previous extreme rates; Penang and Saigon steadily for both tongue and leaf, but cheaper for cake.

Cochineal sales were held on the 5th inst. Holders were firm for an advance, but the demand was not active. What was let go made 1½d. to 2d. higher prices.

Olive oils are repeatedly said to be of very limited produce this year, but there are still no speculative buyers. The Italian holders are even willing to make slight concessions for ready cash, but the stock in this country is large. Linseed oil has tended downwards, and is now obtainable at 28l. 7s. 6d., nearly 1l. lower than last month. Large dealings in refined petroleum have kept up the spot price, but there is a manifest tendency towards a slight decline, and for forward delivery rates are a trifle easier. American turpentine has somewhat strengthened its position.

At the drug sales on Thursday last it was announced that no further auctions would take place until January 10. Only a small amount of business was done. Good aloes and cinchona bark were in demand, balsam capivi was a trifle, as was also almond oil. Some good Jamaica honey made 46s. The sandal wood referred to last month tainted with assafetida was again put up and bought in this month at 19l.

Medical Cleanings.

BENTAMARI is a bitter drug used by the blacks of Senegambia. Need we add that some enthusiastic doctor has found it to be superior to quinine?

SALICYLIC ACID IN GOUT.—Dr. Rube relates, in the *Deutsche Zeitschr. f. pr. Med.* an obstinate case of gout, which had resisted all other forms of treatment, but which was promptly relieved by the free administration of salicylic acid. About two and a-half drachms were given during the first twenty-four hours. On the third day the patient was free from pain, and able to walk about. His appetite was rapidly regained, and at the time of the report, several months after treatment, he had had no relapse.

A MEDICAL RESTAURANT has been established in London, or so at least says the London correspondent of an American journal, on the principle that diseases can generally be cured by a special system of diet, and that they are caused chiefly by improper food. On the entrance of a visitor, a physician asks him regarding his ailments. His meal is then prescribed, and he is allowed to eat no more than is presented to him. At the close he is dismissed to smoke a medicated cigar, and to sip coffee, camomile tea, or whatever other beverage may be considered advisable. The idea is ingenious, but we doubt if it has yet or even could be realised.

Monthly Price Current.

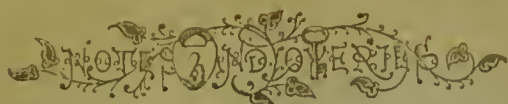
The prices quoted in the following list are those actually obtained in Mineral Lane for articles sold in bulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Prices.

CHEMICALS.		1877.		1876.	
ACIDS—		s. d.	s. d.	s. d.	s. d.
Acetic	per lb.	0 2½ to	0 0	0 3½ to	0 0
Citric	per lb.	2 4 ..	2 5	2 7½ ..	2 8
Hydrochloric	per cwt.	5 0 ..	7 0	4 0 ..	7 0
Nitric	per lb.	0 4½ ..	0 0	0 4½ ..	0 0
Oxalic	"	0 5 ..	0 0	0 5½ ..	0 5½
Sulphuric	"	0 0½ ..	0 1	0 0½ ..	0 1
Tartaric crystal ..	"	1 5 ..	0 0	1 7 ..	0 0
powdered ..	"	1 5 ..	0 0	1 7 ..	0 0
ANTIMONY ore	per ton	240 0 ..	300 0	295 0 ..	300 0
crude ..	per cwt.	37 0 ..	0 0	42 0 ..	0 0
star	"	49 0 ..	50 0	51 0 ..	56 0
ARSENIC lump	"	25 0 ..	0 0	26 0 ..	26 6
powder	"	9 0 ..	9 3	10 0 ..	11 0
BRIMSTONE	per ton	100 0 ..	115 0	120 0 ..	130 0
roll ..	per cwt.	9 6 ..	10 6	10 0 ..	0 0
flour	"	11 6 ..	13 6	13 6 ..	0 0
IODINE, dry	per oz.	0 10½ ..	0 0	0 5½ ..	0 0
IVORY BLACK, dry ..	per cwt.	8 6 ..	0 0	8 6 ..	0 0
MAGNESIA, calcined ..	per lb.	1 10 ..	0 0	1 8 ..	0 0
MERCURY	per bottle	145 0 ..	0 0	170 0 ..	0 0
MINIUM, red	per cwt.	21 6 ..	0 0	23 3 ..	0 0
orange ..	"	33 0 ..	0 0	37 0 ..	0 0
PRECIPITATE, red ..	per lb.	3 7 ..	0 0	4 1 ..	0 0
white ..	"	3 6 ..	0 0	4 0 ..	0 0
PRUSSIAN BLUE ..	"	0 0 ..	0 0	0 0 ..	0 0
SALTS—					
Alum	per ton	137 6 ..	145 0	115 0 ..	150 0
powder	"	155 0 ..	0 0	155 0 ..	160 0
Ammonia:					
Carbonate	per lb.	0 5½ ..	0 5½	0 5 ..	0 5½
Hydrochlorate, crude,					
white	per ton	560 0 ..	720 0	560 0 ..	670 0
British (see Sal Am.)					
Sulphate	per ton	405 0 ..	415 0	375 0 ..	385 0
Argol, Cape	per cwt.	75 0 ..	95 0	80 0 ..	91 0
Refr. ..	"	67 0 ..	73 0	65 0 ..	75 0
Oporto, red ..	"	32 6 ..	33 0	33 6 ..	34 0
Sicily	"	60 0 ..	65 0	60 0 ..	62 0
Ashes (see Potash and Soda)					
Bleaching powd.	per cwt.	6 3 ..	0 0	8 0 ..	0 0
Borax, crude	"	27 0 ..	38 0	30 0 ..	40 0
British refined ..	"	37 6 ..	40 6	40 0 ..	42 0
Calomel	per lb.	3 2 ..	3 8	3 8 ..	0 0
Copper:					
Sulphate	per cwt.	20 0 ..	20 3	22 0 ..	22 6
Copperas, green ..	per ton	55 0 ..	60 0	55 0 ..	65 0
Corrosive Sublimat. p. lb.		2 7 ..	0 0	3 1 ..	0 0
Cr. Tartar, French, p. cwt.		101 0 ..	0 0	114 0 ..	115 0
brown ..	"	0 0 ..	0 0	95 0 ..	0 0
Epsom Salt	per cwt.	4 3 ..	6 0	5 3 ..	7 0
Glauber Salt	"	3 0 ..	4 6	4 6 ..	5 6
Lime:					
Acetate, white, per cwt.		11 0 ..	20 0	11 0 ..	20 0
Magnesia Carbonate ..	"	47 6 ..	0 0	45 0 ..	0 0
Potash:					
Bichromate	per lb.	0 3½ ..	0 4	0 4½ ..	0 0
Carbonate:					
Potashes, Canada, 1st					
sort	per cwt.	23 0 ..	23 6	26 0 ..	0 0
Pearlashes, Canada, 1st					
sort	per cwt.	29 0 ..	0 0	34 0 ..	35 0
Chlorate	per lb.	0 8 ..	0 8½	0 9½ ..	0 9½
Prussiate	"	0 10½ ..	0 11½	1 0 ..	1 0½
red ..	"	0 0 ..	0 0	0 0 ..	0 0
Tartrate (see Argol and Cream of Tartar)					
Potassium:					
Chloride	per cwt.	0 0 ..	0 0	0 0 ..	0 0
Iodide	per lb.	13 6 ..	14 0	7 9 ..	8 0
Quinine:					
Sulphate, British, in					
bottles	per oz.	11 6 ..	0 0	11 0 ..	0 0
Sulphate, French ..	"	11 0 ..	11 3	10 0 ..	10 3
Sal Acetate	per lb.	0 7 ..	0 7½	0 7½ ..	0 8
Sal Ammoniac, Brit. cwt.		42 0 ..	45 0	44 0 ..	45 0
Salt-petre:					
Bengal, 6 per cent. or					
under	per cwt.	20 6 ..	21 0	19 9 ..	20 0
Bengal, over 6 per cent.					
per cwt.		19 6 ..	20 3	18 6 ..	19 6
British, refined ..	"	24 9 ..	26 0	23 6 ..	24 9
Soda Bicarbonate, p. cwt.		10 0 ..	10 3	12 0 ..	0 0
Carbonate:					
Soda Ash	per dog.	0 1½ ..	0 1½	0 2½ ..	0 0
Soda Crystals per ton		72 6 ..	0 0	87 6 ..	90 0
Hypo-sulphite, per cwt.		0 0 ..	0 0	0 0 ..	0 0
Nitrate	"	15 0 ..	15 6	12 6 ..	0 0
SUGAR OF LEAD, White cwt.		36 0 ..	37 0	37 0 ..	38 0
Brown, cwt.		26 0 ..	0 0	27 0 ..	0 0
SULPHUR (see Brimstone)					

		1877.		1876.	
VERMOREL		s. d.	s. d.	s. d.	s. d.
VERMOREL, English ..	per lb.	1 1 to	1 5	1 1 to	1 5
China ..	"	2 8 ..	0 0	3 6 ..	0 0
China ..	"	2 2 ..	0 0	3 0 ..	0 0
DRUGS.					
ALGOL, Hepatic	per cwt.	70 0 ..	180 0	70 0 ..	160 0
Scotrine ..	"	85 0 ..	200 0	65 0 ..	180 0
Oppe, good ..	"	47 0 ..	51 0	49 0 ..	50 0
Inferior ..	"	41 0 ..	46 0	42 0 ..	48 0
Barbades ..	"	41 0 ..	160 0	55 0 ..	190 0
AMBERGIDS, grey	oz.	81 0 ..	85 0	55 0 ..	65 0
BALSAM					
Canada	per lb.	1 0 ..	0 0	1 4 ..	0 0
Capivi	"	1 4½ ..	1 6	1 10 ..	2 0
Peru	"	4 10 ..	0 0	5 3 ..	0 0
Tolu	"	5 9 ..	6 0	11 0 ..	12 0
BARKS.					
China alb.	per cwt.	18 0 ..	22 0	20 0 ..	24 6
Cascarilla	"	15 6 ..	23 0	16 0 ..	21 0
Peru, crown & grey per lb.		1 6 ..	3 0	1 3 ..	3 1
Calisaya, flat ..	"	3 6 ..	4 6	2 6 ..	5 0
" quill ..	"	4 6 ..	7 0	2 9 ..	5 0
Carthagena ..	"	1 9 ..	3 0	2 5 ..	3 7
Columbian ..	"	2 9 ..	5 7	2 0 ..	5 3
E. I.	"	1 2 ..	4 0	1 9 ..	3 6
" good & fine ..	"	1 8 ..	8 3	4 0 ..	5 0
Pitaya ..	"	0 6 ..	1 6	0 10 ..	2 4
Red ..	"	3 3 ..	5 0	2 0 ..	4 6
Buchu Leaves	"	0 2½ ..	0 3	0 1 ..	1 1
CAMPHOR, China	per cwt.	85 0 ..	0 0	77 6 ..	87 6
Japan ..	"	86 6 ..	87 6	87 0 ..	89 0
Refin. Eng. per lb.		1 2½ ..	0 0	1 2 ..	0 0
CANTHARIDES	"	2 0 ..	5 0	2 8 ..	3 6
CHAMOMILE FLOWERS p. cwt.		50 0 ..	200 0	45 0 ..	200 0
CASTOREUM	per lb.	9 0 ..	39 0	7 0 ..	25 0
DRAGON'S BLOOD, lb. p. cwt.		95 0 ..	280 0	140 0 ..	260 0
FRUITS AND SEEDS (see also Seeds and Spices).					
Anise, China Star per cwt.		92 6 ..	102 6	85 0 ..	105 0
Spanish, &c.	"	30 0 ..	45 0	28 0 ..	40 0
Beans, Tonquin	per lb.	1 9 ..	5 0	1 7 ..	2 7
Cardamoms, Malabar					
good	"	5 0 ..	5 10	3 9 ..	4 2
inferior ..	"	1 6 ..	4 5	0 9 ..	3 8
Alpe ..	"	2 6 ..	5 6	2 0 ..	3 8
Malabar ..	"	2 2 ..	3 6	1 11 ..	3 5
Ceylon ..	"	3 6 ..	4 6	4 6 ..	5 0
Cassia Pistia	per cwt.	80 0 ..	89 0	19 0 ..	32 0
Castor Seeds ..	"	0 0 ..	0 0	5 0 ..	10 6
Cocculus Indicus ..	"	9 6 ..	11 0	9 0 ..	11 0
Colocynth, apple ..	per lb.	1 0 ..	1 9	0 6 ..	0 11
Croton Seeds	per cwt.	26 0 ..	27 6	35 0 ..	36 6
Cubeb ..	"	27 0 ..	28 0	30 0 ..	0 0
Cumin ..	"	20 0 ..	32 0	15 0 ..	26 0
Dividivi ..	"	12 0 ..	15 0	10 0 ..	15 0
Fenugreek ..	"	6 0 ..	10 0	9 0 ..	12 0
Guinea Grains ..	"	28 0 ..	0 0	20 0 ..	0 0
Juniper Berries ..	"	6 6 ..	9 0	8 0 ..	10 0
Nux Vomica ..	"	9 0 ..	14 0	9 0 ..	12 0
Tamarinds, East India,	"	0 0 ..	0 0	10 0 ..	15 6
West India ..	"	25 6 ..	27 6	10 0 ..	15 6
Vanilla, large	per lb.	27 0 ..	31 0	26 0 ..	40 0
inferior ..	"	15 0 ..	26 0	13 0 ..	20 0
GINGER, Preserved, per lb.		0 4½ ..	0 7	0 4 ..	0 8
HONEY, Chili	per cwt.	44 0 ..	48 0	40 0 ..	47 6
Jamaica ..	"	38 0 ..	43 0	35 0 ..	46 0
Anstralian ..	"	0 0 ..	0 0	0 0 ..	0 0
IPECACUANA	per lb.	5 6 ..	5 9	4 0 ..	4 6
ISINGLASS, Brazil ..	"	3 0 ..	4 9	2 6 ..	4 10
Tongue sort ..	"	3 4 ..	5 5	3 0 ..	5 0
East India ..	"	2 3 ..	5 4	1 6 ..	4 9
West India ..	"	4 0 ..	4 7	4 1 ..	4 9
Russ. long staple ..	"	8 0 ..	15 0	9 0 ..	12 6
" inferior ..	"	0 0 ..	0 0	0 0 ..	0 0
" Simovia ..	"	1 6 ..	3 0	2 0 ..	3 3
JALAP, good	"	0 8 ..	0 10	0 7 ..	0 8
infer. & stems ..	"	0 7 ..	0 7½	0 6 ..	0 6½
LEMON JUICE	per degree	0 0½ ..	0 1½	0 1½ ..	0 1½
LIME JUICE	per gall.	0 0 ..	0 0	1 3 ..	1 8
LIQUORICE, Spanish per cwt.		34 0 ..	39 0	0 0 ..	0 0
Liquorice Root ..	"	0 0 ..	0 0	12 0 ..	30 0
MANNA, flaky	per lb.	3 6 ..	4 0	5 6 ..	6 0
small ..	"	1 4 ..	1 6	1 6 ..	1 9
MUSK, Pod	per oz.	23 0 ..	51 6	19 0 ..	49 0
Grain ..	"	35 0 ..	55 0	45 0 ..	60 0
OILS (see also separate list)					
Almond, expressed per lb.		1 8 ..	0 0	1 2 ..	0 0
Castor, 1st pale ..	"	0 5 ..	0 0	0 4½ ..	0 4½
second ..	"	0 4½ ..	0 4½	0 3½ ..	0 4
Cod Liver	per gall.	2 8 ..	4 6	5 6 ..	7 6
Croton	per oz.	0 2½ ..	0 2½	0 2½ ..	0 0
Essential Oils:					
Almond	per lb.	25 6 ..	0 0	20 0 ..	0 0
Anise-seed	"	6 3 ..	6 6	6 6 ..	6 9
Bay	per cwt.	0 0 ..	0 0	65 0 ..	70 0
Bergamot	per lb.	10 0 ..	15 0	10 0 ..	15 0
Cajuput	per bottle	3 0 ..	3 6	2 9 ..	3 0
Caraway	per lb.	9 0 ..	9 3	9 0 ..	9 3
Cassia	"	3 2 ..	0 0	3 10 ..	4 0
Cinnamon	per oz.	3 6 ..	5 6	2 6 ..	6 6
Cinnamon-leaf ..	"	0 2½ ..	0 3	0 2½ ..	0 4
Citronelle ..	"	0 2½ ..	0 0	0 2 ..	0 0
Clove	"	8 6 ..	0 0	9 0 ..	0 0
Juniper	"	0 0 ..	0 0	0 0 ..	0 0
Lavender	per lb.	1 8 ..	7 0	1 8 ..	7 0
Lemon	"	5 0 ..	8 6	7 0 ..	9 6
Lemongrass	per oz.	0 2½ ..	0 2½	0 2½ ..	0 0

1877.				1876.			
Essential Oils, continued:—							
Neroli	3 0	to	6 6	3 0	to	6 6	
Nutmeg	0 5	..	0 0	0 7	..	0 7	
Orange	4 3	..	7 0	6 0	..	9 0	
Otto of Roscs	16 0	..	22 0	13 0	..	25 0	
Patchouli	1 9	..	3 0	2 0	..	3 6	
Peppermint:							
American	10 9	..	12 6	12 6	..	14 9	
English	24 0	..	25 0	34 0	..	35 0	
Rosemary	2 0	..	2 6	2 0	..	2 6	
Sassafras	2 3	..	2 6	2 3	..	2 6	
Spearmint	12 0	..	15 0	14 0	..	16 0	
Thyme	0 0	..	0 0	0 0	..	0 0	
Mace, expressed	0 6	..	0 10	0 6	..	0 10	
OPUM, Turkey	16 0	..	18 0	21 0	..	25 0	
inferior	10 0	..	12 0	10 0	..	18 0	
QUASSIA (bitter wood) per ton	100 0	..	130 0	100 0	..	140 0	
RHUBARB, China, good and fine	2 6	..	3 0	3 2	..	4 5	
Mid. to ord.	0 9	..	2 1	0 8	..	2 11	
Dutch Trimmed ..	0 0	..	0 0	0 0	..	0 0	
ROOTS—Galumha	23 0	..	38 0	18 0	..	26 0	
China	30 0	..	32 0	22 0	..	24 0	
Chiretta	0 3	..	0 4	0 3	..	0 4	
Galangal	20 0	..	21 0	19 0	..	22 0	
Gentian	20 0	..	22 0	23 0	..	24 0	
Helleboro	0 0	..	0 0	0 0	..	0 0	
Oris	55 0	..	65 0	26 0	..	75 0	
Pellitory	70 0	..	76 0	70 0	..	76 0	
Pink	0 0	..	0 0	0 0	..	0 0	
Rhatany	0 1	..	0 8	0 4	..	1 0	
Seneca	3 0	..	3 6	3 6	..	4 0	
Snake	0 10	..	1 0	0 6	..	0 7	
SAFFRON, Spanish ..	30 0	..	32 0	33 0	..	37 0	
SALEP	210 0	..	300 0	0 0	..	0 0	
SARSAPILLA, Lima per lb.	0 0	..	0 0	0 5	..	0 7	
Guayaquil	2 2	..	2 6	1 9	..	2 0	
Honduras	0 11	..	1 6	1 1	..	1 6	
Jamaica	1 2	..	2 6	1 9	..	3 0	
SASSAFRAS	9 0	..	11 0	0 0	..	0 0	
SCAMMONY, Virgin ..	0 0	..	0 0	21 0	..	30 0	
second & ordinary ..	0 0	..	0 0	6 0	..	22 0	
SENNA, Bombay	0 1	..	1 6	0 1	..	0 4	
Tinnivelly	0 1	..	1 6	0 2	..	2 0	
Alexandria	0 5	..	2 0	0 5	..	2 8	
SPERMACE, refined ..	1 4	..	0 0	1 4	..	0 0	
American	1 3	..	0 0	1 0	..	1 2	
SQUILLS	0 2	..	0 3	0 2	..	0 3	
GUMS.							
AMMONIAC drop .. per cwt.	1 15	..	2 3	2 2	..	2 10	
lump ..	1 10	..	1 15	1 0	..	1 14	
ANIMI, fine washed ..	12 0	..	13 15	11 0	..	12 10	
bold scraped ..	9 15	..	11 15	9 10	..	10 15	
sorts	6 15	..	9 10	6 10	..	9 5	
dark	4 0	..	6 12 6	4 0	..	6 0	
ARABIC, E.I., fine							
pale picked ..	3 0	..	3 16	3 0	..	4 0	
sts., md. to fin. ..	2 5	..	2 17 6	2 9	..	2 18	
garblings ..	1 10	..	2 0	1 1	..	2 4	
TURKEY, pick. gd. to fin. ..	6 0	..	9 10	6 10	..	10 15	
second & inf. ..	3 0	..	5 15	3 0	..	6 10	
in sorts ..	2 10	..	3 16	2 5	..	3 5	
Godda ..	1 14	..	1 19	1 6	..	1 10	
BARBARY, white ..	0 0	..	0 0	2 4	..	2 8	
brown ..	2 7	..	2 12	1 12	..	1 16	
AUSTRALIAN	1 19	..	2 5	1 15	..	2 7	
ASAPGETIDA, cm. to fin. ..	0 15	..	2 0	0 18	..	2 10	
BENJAMIN, 1st & 2nd ..	4 5	..	8 0	10 0	..	39 0	
Sumatra 1st & 2nd ..	6 0	..	14 0	6 10	..	15 0	
3rd ..	2 4	..	5 10	3 10	..	5 6	
COPAL, Angola red ..	6 0	..	6 15	6 0	..	6 15	
Bengucla ..	4 0	..	5 0	4 0	..	5 0	
Sierra Leone, per lb.	0 6	..	0 9	0 6	..	0 11	
Manilla	18 0	..	27 0	15 0	..	27 0	
DAMMAR, pale	75 0	..	79 0	66 0	..	68 0	
Singapore	75 0	..	78 0	65 0	..	67 0	
EUPHORBUM	9 0	..	15 0	11 0	..	16 0	
GALBANUM	0 9	..	1 3	0 5	..	1 3	
GAMBOGE, pckd. pipe per cwt.	190 0	..	290 0	220 0	..	270 0	
QUALACUM	1 10	..	2 5	1 3	..	3 0	
KINO	81 0	..	86 0	40 0	..	50 0	
KOWRIE, rough ..	24 0	..	43 0	32 0	..	58 0	
seraped sorts ..	46 0	..	55 0	60 0	..	70 0	
Mastic, picked	4 0	..	5 0	4 0	..	5 0	
MYRRH, gd. & fine per cwt.	152 0	..	240 0	160 0	..	170 0	
ord. to fair	89 0	..	130 0	100 0	..	150 0	
OLIBANUM, p. drop ..	44 0	..	48 0	50 0	..	51 0	
amber & ylw. ..	31 0	..	43 0	36 0	..	50 0	
garblings ..	15 0	..	28 0	15 0	..	26 0	
SENEGAL	60 0	..	65 0	60 0	..	65 0	
SANDARAC	87 0	..	105 0	75 0	..	85 0	
SHELLAC, Orange ..	73 0	..	91 0	100 0	..	160 0	
Liver ..	70 0	..	78 0	95 0	..	115 0	
THUS	20 0	..	21 6	20 0	..	21 6	
TRAGACANTH, leaf ..	240 0	..	400 0	240 0	..	400 0	
in sorts ..	25 0	..	175 0	25 0	..	175 0	
OILS.							
SEAL, pale	34 0	..	0 0	34 0	..	0 0	
yellow to tinged ..	30 10	..	33 0	32 0	..	33 0	
brown	29 0	..	31 0	31 0	..	31 10	
SPERM	87 0	..	0 0	90 0	..	0 0	
BODY	0 0	..	0 0	0 0	..	0 0	
COD	34 0	..	0 0	41 11	..	0 0	

Oils, continued:—		1877.		1876.	
WHALE, South Sea, pale, per tun	£ s.	0 to	£ s.	0 to	£ s.
yellow ..	33 0	..	34 0	32 0	.. 34 10
brown ..	30 0	..	31 0	30 0	.. 0 0
East India, Fish ..	25 10	..	0 0	26 10	.. 0 0
OLIVE, Galipoli	0 0	..	0 0	48 0	.. 48 10
Gloja	0 0	..	0 0	47 10	.. 48 0
Levant	48 10	..	0 0	0 0	.. 0 0
Mogador	48 0	..	0 0	0 0	.. 0 0
Spanish	49 10	..	0 0	0 0	.. 0 0
Sicily	49 0	..	0 0	0 0	.. 0 0
COCOANUT, Coehlr. ..	43 0	..	0 0	41 0	.. 0 0
Ceylon ..	38 10	..	0 0	37 15	.. 0 0
Mauritius ..	39 0	..	49 0	31 0	.. 37 0
GROUND NUT AND GINGELLY:					
Bombay	0 0	..	0 0	0 0	.. 0 0
Madras	0 0	..	0 0	36 0	.. 37 0
PALM, fine	40 10	..	0 0	40 10	.. 41 0
LINSEED	28 7 3	..	28 10	26 0	.. 26 5
RAPESEED, English, pale ..	39 10	..	0 0	41 0	.. 0 0
brown ..	37 10	..	0 0	38 15	.. 39 0
Foreign, pale ..	0 0	..	0 0	40 10	.. 41 0
brown	0 0	..	0 0	0 0	.. 0 0
COTTONSEED	33 0	..	0 0	30 0	.. 0 0
LARD	50 0	..	0 0	58 0	.. 0 0
TALLOW	30 0	..	54 0	31 0	.. 46 0
TURPENTINE, American, cks.	24 6	..	24 3	30 0	.. 30 3
French ..	0 0	..	0 0	0 0	.. 0 0
PETROLEUM, Crude	0 0	..	0 0	0 0	.. 0 0
refined, per gall.	1 0 1/2	..	1 0	2 4	.. 0 0
Spirit ..	0 8	..	0 9 1/2	0 0	.. 0 0
SEEDS.					
CANARY	46 0	..	55 0	60 6	.. 75 0
CARAWAY, English per cwt.	43 0	..	45 0	44 0	.. 45 0
German, &c.	48 0	..	49 0	0 0	.. 0 0
CORIANDER	18 0	..	23 0	12 0	.. 21 0
HEMP	0 0	..	0 0	40 0	.. 45 0
LINSEED, English ..	0 0	..	0 0	53 0	.. 66 0
Black Sea & Azof ..	55 0	..	0 0	52 6	.. 0 0
Calcutta ..	52 6	..	0 0	53 6	.. 0 0
Bombay ..	57 0	..	0 0	0 6	.. 0 0
St. Petersburg ..	52 6	..	53 0	52 0	.. 53 0
Mustard, brown	0 0	..	0 0	12 0	.. 15 0
white ..	13 0	..	16 0	13 0	.. 16 0
Poppy, East India, per qr.	54 0	..	54 0	51 0	.. 52 0
SPICES.					
CASSIA LIGNEA .. per cwt.	44 0	..	40 0	52 0	.. 65 0
Vera ..	22 0	..	45 0	22 0	.. 44 0
Buds ..	70 0	..	73 0	82 0	.. 85 0
CINNAMON, Ceylon:					
1st quality	2 2	..	3 6	1 10	.. 3 7
2nd do.	2 0	..	2 10	1 7	.. 2 9
3rd do.	1 9	..	2 3	1 5	.. 2 6
Tellicherry ..	2 3	..	2 7	2 9	.. 3 0
CLOVES, Penang ..	1 11	..	2 2	2 5	.. 2 6
Amboyne ..	1 5	..	1 7	1 7	.. 1 9
Zanzibar ..	1 2	..	1 3	1 1	.. 1 3
GINGER, Jam., fine per cwt.	91 0	..	202 6	91 0	.. 202 6
Ord. to good ..	53 0	..	90 0	54 0	.. 90 0
African	25 0	..	26 0	29 0	.. 0 0
Bengal	22 0	..	22 6	27 0	.. 27 6
Malabar ..	26 0	..	28 0	28 6	.. 0 0
Cochin ..	50 0	..	115 0	50 0	.. 115 0
PEPPER, Bk., Malabar, per lb.	0 4 1/2	..	0 5 1/2	0 4 1/2	.. 0 5 1/2
Singapore ..	0 3 1/2	..	0 3 3/4	0 4	.. 0 4 1/4
White Tellicherry ..	0 10	..	1 4	0 10	.. 1 4
Cayenne ..	1 4	..	3 0	2 0	.. 2 8
MACE, 1st quality ..	2 2	..	3 3	2 3	.. 3 3
2nd and inferior ..	1 0	..	2 1	1 0	.. 2 2
NUTMEGS, 78 to 60 to lb. ..	3 11	..	4 6	3 9	.. 4 9
90 to 80 ..	3 2	..	3 10	3 2	.. 3 8
132 to 95 ..	2 10	..	3 1	2 3	.. 3 1
PIMENTA	0 4	..	0 4 1/2	0 4	.. 0 4 1/2
VARIOUS PRODUCTS.					
COCHINEAL—					
Honduras, black .. per lb.	2 2	..	2 6	2 10	.. 3 0
silver ..	2 1	..	2 3	2 7	.. 2 9
pasty ..	2 0	..	0 0	2 6	.. 0 0
Mexican, black ..	2 0	..	2 1	2 8	.. 2 10
silver ..	1 10	..	1 11	2 7	.. 0 0
Teneriffe, black ..	2 2	..	2 11	2 11	.. 3 9
silver ..	2 0	..	2 3	2 8	.. 2 10
SOAP, Castile	26 0	..	33 0	33 0	.. 34 0
SOY, China	2 3	..	2 4	1 8	.. 1 9
SPONGE, Turk. fin. pkd pr lb.	0 0	..	0 0	12 0	.. 16 0
Fair to good ..	0 0	..	0 0	4 0	.. 11 0
Ordinary ..	0 0	..	0 0	1 0	.. 3 0
Bahama ..	0 0	..	0 0	0 6	.. 3 0
TERRA JAPONICA—					
Gambier	18 6	..	18 9	20 0	.. 20 3
Free cubos	29 6	..	30 6	34 0	.. 36 0
Cutch ..	23 0	..	25 0	25 0	.. 26 6
WOOD, DYK, Bar .. per ton	£3 10	..	£3 0	£3 5	.. 3 7 1/2
Brazil	14 0	..	20 0	0 0	.. 0 0
Cam ..	18 0	..	34 0	18 0	.. 31 0
Pastle, Cuba ..	8 0	..	8 10	8 10	.. 9 0
Jamaica	5 5	..	5 10	5 0	.. 5 10
Log wood, Cutpouchy ..	8 15	..	9 0	9 10	.. 10 0
Honduras ..	6 10	..	6 15	6 5	.. 6 15
St. Domingo ..	5 10	..	6 0	5 10	.. 6 0
Jamaica ..	5 0	..	5 10	5 5	.. 6 0
Lima, first pile ..	9 15	..	10 0	8 10	.. 9 0
Red Sanders ..	6 0	..	6 10	6 0	.. 6 10



Scim.—Your four years' apprenticeship from 1859 to 1863, and your subsequent two years' assistantship, unfortunately, will not exempt you from any of the pharmaceutical examinations. You will have to pass the Preliminary and Minor before you can commence business.

C. H. A. says (1) "Would you kindly tell me something to colour a perfume green, so that when evaporated it will not leave a stain?" We should have been very happy to do so if we had been able. But this supposes a green colouring matter which is volatile, and we do not know of such a one. The "green" colour of the essence of wood violets of the shops is, we believe, produced by adding green leaves to the perfume. Although the stain it leaves is very slight, yet it is quite perceptible. (2) "Also a good liquid for silvering, so that by dipping any little trinkets, &c., in it they will have the appearance of silver." Silvering is not such a simple operation as our correspondent seems to imagine. The results produced by dipping are always inferior to those produced by electricity. One solution is made by dissolving 100 parts sulphate of soda and 15 of nitrate of silver in water. The metal is to be dipped in the solution. A better preparation is made by mixing 30 grains each of nitrate of silver and common salt with $3\frac{1}{2}$ drachms cream of tartar. The powder is to be moistened and rubbed on the article.

W. T.—We think you will find this a good show colour which will not deposit:—Deposit 2 ozs. of blue vitriol in a pint of water with $\frac{1}{2}$ oz. of oil of vitriol. *Glycerine and Lime Juice.*—The following formula is given in Cristini's "Perfumery" (reviewed in this number), but the author says "there are no fumery of making it a perfectly homogeneous compound except by agitation":—

Glycerine	2 ozs.
Juice of 6 lemons	
Castor oil	2 ozs.
Alcohol	8 ozs.
Liquor potasse	$\frac{1}{2}$ oz.
Orange flower water	4 ozs.
Oil of lemon	2 drachms.

Mix the oil and alcohol, then the liquor potasse and oil of lemon, then mix the other ingredients together and add them to the first mixture by degrees, agitating frequently.

Facto asks for a formula for making "liq. copaiba et cubeb et huehu" as sent out by the wholesale houses. Perhaps some one can furnish it.

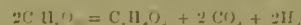
Mr. Fever.—Rather outside our range.

Subscriber (Ireland) writes:—"Will you kindly inform me if a chemist and druggist of several years' standing can legally employ a pharmacist to compound prescriptions on the premises? If so, does the compounder's name require to be exhibited in the department, or expressed on bottles, labels, &c., in addition to the proprietor's name, or, for instance, could Jones & Co. legally compound where one only of the firm was licensed, as I find no clause in English or Irish bye-laws dealing directly with this question. Your reply in detail would interest and much oblige the writer, and doubtless a number of your readers." The English law undoubtedly applies expressly to the proprietor of a business. He must be registered, and he alone need be. An unregistered man might keep a dozen registered assistants, but that would not benefit his position legally. So, too, if A. and B. are in partnership as chemists and druggists, A. being registered, but not B., such business would be illicit. Probably the firm could be prosecuted, but certainly B. could. In Ireland the conditions seem to us to be similar, Section 30 of the Irish Pharmacy Act says "It shall be unlawful for any person to sell or keep open shop for retailing, dispensing, or compounding poisons . . . or medical prescriptions, unless such person be registered," &c. Section 31 exempts from this Act chemists and druggists in business at the time of the passing of the Act, but it is expressly stipulated (as we read that section) that such chemist and druggist (unregistered) is not allowed to keep open shop for compounding poisons or medical prescriptions. So that the person who keeps the open shop for such purposes would be, in our opinion, a law-breaker.

Citric.—The United Kingdom Mineral Water Trade Review is published monthly by Barrett, Sons & Co., 21 Seething Lane, E.C., price 6d. The Mineral Water Recorder is published monthly, price 6d., or yearly subscription 6s., by M. Adams, 113 New North Road, N.

Ignoramus asks:—"Can lactic acid be converted into butyric acid?" Not artificially, but the common process used to produce lactic acid will, if allowed to continue, convert that acid into butyric acid. The process we refer to is as follows:—2 gallons of milk are mixed with 6 lbs. of raw sugar, 12 pints of water, 8 ozs. putrid cheese, and 4 lbs. of chalk, mixed to a creamy consistence with some of the liquid. The mixture is maintained at a temperature of about 83° Fahr., and occasionally stirred. The chalk is added to neutralise the lactic acid, which would otherwise coagulate the

casein and stop the fermentation. After ten to twenty days the mixture will consist of a semi-solid mass of calcium lactate. If this be left undisturbed it will gradually appear and be converted into soluble calcium butyrate, whence the acid may be obtained by distillation with sulphuric acid. The reaction "probably" takes place according to this equation:—



or 2 molecules of lactic acid give one molecule butyric acid, 2 of carbon dioxide, and 2 of hydrogen.

Par.—Hyposulphite of soda is sent out by manufacturers in wooden casks, and is kept by photographic chemists in open drawers, so that there is no need to keep it in stoppered bottles. If it is kept in a dry place it will remain unchanged for an indefinite period. No doubt, like most other things, it would keep better in crystals than in powder. The powder would probably cake very soon. The salt is so soluble in water that it matters very little how it may be given to cattle. Probably as good a plan as any would be to mix it with a bran mash. Perhaps the "Veterinarian's Pocket Remembrancer," by G. Armitage, published by Churchill at 3s., would suit your purpose.

Pat. Nit. wants "the best book published at about 10s. to give a correct epitome of diseases in general; causes, treatment, &c.; in fact, such information as would be advantageous for a chemist and druggist to know, so that when a doctor speaks of diseases in technical terms one could be able to understand what is meant." As far as we can judge, Hooper's "Physician's Vade Mecum," 9th edition, published by Churchill at 12s. 6d., would answer your purpose.

Nemo asks if Lescher's "Elements of Pharmacy" is a suitable book for a Minor student. We think so, but would strongly advise "Nemo" not to trust to any single book. He will find Royle's "Manual of Materia Medica" and Flückiger's and Hanbury's "Pharmacographia" excellent supplements for the Materia Medica, while Bentley's "Botany" and Atfield's "Chemistry" will help out those subjects.

J. R. wants our opinion as to the best work on the detection of adulteration of the different oils of commerce, if there be such. There is no such book yet published. "J. R." could compile a great deal of information on the subject from Watts' "Dictionary of Chemistry," and would find there all that is known. It would, however, have to be collected from the different volumes.

Another Ignoramus (our old friend is not dead yet, it appears) wishes to know the title, publisher, and price of the best work on physiology for one who knows nothing about it. Huxley's "Lessons in Elementary Physiology," published at 4s. 6d. by Macmillan, is undoubtedly the very thing for him.

J. Dove.—The formula for glycerine jelly is not intended to make it transparent. If you wish it quite transparent, you will find the following answer:—Take 1 oz. transparent soap, dissolve it in 4 ozs. of water and 4 ozs. glycerine, by the aid of heat. While still warm add 20 ozs. glycerine, and when nearly cold add perfume and pour into glass jars. This will make a transparent jelly of a pale amber colour.

S. M. Davis.—The list of poisons published in the London Gazette of December 21, 1869, only contains the additions to that published in the Pharmacy Act of 1868. You will find the table complete in our Diary.

Oil.—The French Huile blanche is the oil of the seeds of *Papaver somniferum* and other species. It is also called Olette, and, more correctly Huile d'Olette and Huile de pavot; in German, Mohnöl and Mohnsamenöl; in English, poppy oil, poppy seed oil, and oil of poppy seeds; Latin, Oleum papaveris. The seeds yield 48 to 50 per cent. The oil is drying, sweet, pale golden in colour, sp. gr. .9243 to .9245, solidifying only at 0° F. It keeps well. Exposed in thin layers to the sun it becomes perfectly colourless. In the Madras Presidency and some other parts of India, it is more used than any other oil for lamps and culinary purposes. It is used for salads, by oil picture painters, for ordinary paints and varnishes, and in soap making. It is extensively used for the adulteration of almond and other oils, and is sometimes sold as inferior qualities of the former. It is occasionally, though rarely, used as a mild alimentary vehicle in medicine. Considerable quantities of it are manufactured and sold annually. The cake remaining after the oil is expressed, called poppy cake, is used for manure. Seneca oil is a very crude, blackish, strong smelling native petroleum, which was collected in the oil regions of Pennsylvania before the discovery of the petroleum wells. It is so called because it was collected by the Seneca Indians, to whom also Rad. Senegae owes its name. The oil is well known in the drug stores of the neighborhood, and is used for rheumatism, &c.

Mr. G. Evans.—The journal you refer to is the property of the society, which is of course responsible for all payments in reference to it. As a matter of fact the said journal is a valuable commercial property.

Indelible Ink (Redwood).—Macerate for an hour under frequent shaking 10 parts of silver, pure cream of tartar, each 24 parts, in aqua ammoniac 96 parts; then add white sugar 6 parts, gum arabic 10, fine lampblack $\frac{1}{2}$ —1 water 90 parts, previously mixed.

